

PHILADELPHIA MEDICAL TIMES.

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No. 525.

JANUARY 16, 1888.

VOL. XVIII

CLINICAL LECTURE.

ON VACCINATION.

BY WM. F. WAUGH, A.M., M.D.,

Professor of Practice of Medicine in the Medico-
Chirurgical College of Philadelphia.

(Reported by Manley F. Gates, Medical Student.)

Delivered October 17, 1887.

GENTLEMEN:—This morning I
shall show you how to perform
vaccination.

Nearly every one is supposed to
know how to do this operation, yet
scarcely one in ten properly performs it.
We are met at the outset with the
question:

Is it possible that the production of
one disease in the system will prevent
infection by another? Certainly not.
Vaccination infects the subject, as Jen-
ner taught, with the disease which it is
desired to prevent, but greatly lessened
in virulence by the fact of previous
transmission through the body of one
of the lower animals.

Two forms of virus are in common
use, the bovine and the humanized.
The bovine is taken directly from the
heifer, while the humanized is from the
vesicle of a recently vaccinated per-
son. Notwithstanding the commonly
received opinion on this subject, in
common with most physicians of the
largest experience in vaccination, I

prefer the humanized virus. My reason
is that we are but little acquainted with
the disease of animals; although they
are afflicted with some of the most viru-
lent affections known.

Some years ago, the Registrar-Gen-
eral of Great Britain announced that
one-half of the cattle slaughtered for
the London market was afflicted with
tuberculosis. When one remembers the
inoculability of tubercle this thought
is anything but pleasant. Besides, it
must not be forgotten that there is a
peculiar virulence in the diseases which
are transmitted to the human race
from the lower animals. Where can
we find affections as deadly as rabies,
glanders and anthrax? Surely, if we
must choose between our own cap-
acity to judge of the fitness of a child
as a vaccinifer and the ability of a
veterinarian to judge of the fitness of
a heifer, we ought not to hesitate.

Those who have inoculated persons
with syphilis, in vaccinating, have ex-
aggerated the difficulty of avoiding this
accident, to excuse their own culpable
negligence. They have thus beclouded
a simple matter, and brought an unmer-
ited reproach upon humanized virus.
Dealers in bovine virus have encouraged
this tendency.

The physician should use virus (either
humanized or animal) only when he

is perfectly assured as to the purity of its source. And I have never yet met with an instance where an error has been made which was not due to inexcusable carelessness.

Humanized virus is weakened both by using crusts from persons who have been previously successfully vaccinated, and also by waiting till the formation of the crust has proceeded too far before it is removed from the arm. The vesicle should have been well developed, and the patient have had at least slight fever, as this is a natural accompaniment of a successful vaccination.

If the physician select his material from the most typical case of successful vaccination, which he can obtain out of a large number, he will find that its activity will increase in his hands, but if he be not careful in his selections, the characteristic power of his virus will rapidly deteriorate, and will finally become utterly worthless as a protection against variola. Good management and careful thought repay one as well in the vocation of the physician as in any other.

The transmission of a host of diseases, many of them not contagious, has been credited to the account of vaccination, but the real danger is one only: that of infection with syphilis. This accident I have never seen, but unfortunately many cases are on record where it has occurred. *Impetigo contagiosa*, of which the shallow fragile vesicles break out in all parts of the body, may be conveyed by vaccination, and is one of the most common of the sequences which terrify the patient and friends. It is, however, of little consequence, and is easily cured.

Varicella or chicken pox may also be inoculated, together with the vaccine virus. To these two accidents is due a large share of the ill repute which has fallen on vaccination.

Occasionally, some singular results have followed this operation, as in cases with a constitutional tendency to scrofula or eczema, an outbreak of which is apt to follow after vaccination.

It also usually aggravates all febrile affections.

In very many instances, patients mistake the *post hoc* for the *propter hoc*, and bring an unjust accusation against the physician of having been the cause

of such diseases as tubercular meningitis or pneumonia, and I am not quite sure but that some people would attempt to connect in some way a broken leg with the vaccination.

To establish the fact that a disease has been really transmitted by a vaccination, it is necessary that the following points be considered:

1. The vaccinated child really has the disease and did not have it before being vaccinated.

2. It is an affection which can be transmitted by inoculation.

3. The child from which the virus was taken had at that time the disease in question.

4. Other children, vaccinated with the same virus, are also affected with the same disease.

An exception may be made in the case of erysipelas, which may result from the use of filthy instruments. A most striking instance of this occurred in Philadelphia. A vaccine physician, before starting on his round, powdered a crust, reduced it to a paste with water, and allowed it to dry on a glass plate. Whenever he performed a vaccination, he added a drop of water to the mass, and allowed the surplus to dry again. About twenty operations were performed; and twenty times the mass was moistened and dried.

The next day, the remainder of the same mass was used, in the same manner, to vaccinate twenty other children. Every one of those vaccinated on the second day was seized with erysipelas, the germ of which had evidently attacked the decomposing virus during the night. The warmth of the weather contributed to this result.

It is best to prepare the virus separately for each person; and after every vaccination wash the plate and the instrument before repeating the operation.

As to the time for taking the virus, the custom varies in different countries. In America it is usual to wait until the crust has fully formed, and to use it; while in England the vesicle is punctured on the sixth day, and the clear fluid is used.

The English method is really the better, as after the sixth day the power to inoculate is diminished; but it is

not generally well thought of by the American public.

The fifteenth day is the proper time on which to remove the crust for use, as before that time the arm will bleed, and later the underlying film of pus will have dried and adhered to the crust, coming off with it. If carefully done, the operation will give nearly as good results with a crust removed at fifteen days, as with fluid from a vesicle.

The layer of pus which wets the under surface of the crust is not vaccine matter, but ordinary pus, and should be carefully wiped off, or, if dried on, should be scraped from the under surface of the crust. If this precaution be neglected, the patient may faint, or an abscess will be apt to follow the vaccination.

In the cases which I bring before you now, we shall use the best bovine virus which can be obtained, and which I am sure is of good quality.

In the performance of the operation, I prefer scraping to cutting, as the former leaves a larger surface exposed for absorption; and I am careful not to go deeper than is necessary to make a little blood show, for if there is bleeding it will prevent absorption of the virus. It makes no difference what part of the body is selected, but for the sake of uniformity, and on account of the requirements of the school laws, the arm is the most convenient place. I believe that vaccination in one place gives ample protection. The best age is three months, and it should be repeated at seven years and again at fourteen. This will ordinarily be sufficient, but if small-pox threaten, all the people in the house and the immediate neighborhood should be at once re-vaccinated.

It has been my misfortune to have had, out of a total of over ten thousand, one in which a serious result followed vaccination. In this case the child rubbed the spot, and put its fingers directly into its eyes; thus causing the formation of vaccine vesicles on the cornea, and resulting in a nearly sightless eye.

THROUGHOUT the year no other substance is so wholesome or so preventive of chill as a woollen fabric.—*The Lancet*.

ORIGINAL COMMUNICATIONS.

THE MORBID ANATOMY OF PERI-CÆCAL INFLAMMATION.

BY J. H. MUSSER, M. D.

Read at a Meeting of the Philadelphia County Medical Society, held December 14, 1887.

MUCH confusion appears to exist in regard to the nomenclature of the inflammatory affections of the region we are about to consider. It may, therefore, be well to state the meaning of the various terms which will be used in this discussion. By typhlitis we shall understand inflammation of the cæcum; by peri-typhlitis, inflammation of the peritoneum covering the cæcum; by para-typhlitis, inflammation of the connective tissue behind the cæcum. The term typhlitis is often used to include inflammation both of the cæcum and of the appendix. We shall, as suggested by Dr. Fitz, use the term appendicitis for inflammation of the appendix, appendicular peritonitis for inflammation of the appendix and its serous covering, and para-typhlitis for inflammation of the connective tissue around the appendix, as of the cæcum, or, if you please, peri-cæcal abscess.

It is well to know the relative importance of the inflammatory affections in this portion of the intestinal tract. Typhlitis has been considered by systematic writers to be a frequent affection, and yet it is difficult for pathologists to find records of post-mortems in which this condition has been found.

It is true that some writers, especially the Germans, have described cases particularly of stercoral typhlitis, in which inflammation and ulceration of the mucous membrane of the cæcum, by pressure from fecal impaction, was present. Most of us will, however, agree with Fagge that typhlitis is a good general expression, used for all varieties of inflammation of intestinal origin occurring in the right iliac fossa, but that in the majority of cases the correct term should be appendicitis. Fagge relates a case of Williams' in which the patient had all the symptoms of typhlitis and peri-typhlitis, with a tumor in the right iliac fossa. He was recovering from the alleged typhlitis

when an acute affection of the pleura caused his death, and at the post-mortem examination there was found appendicitis, with ulceration and perforation, and not typhlitis.

Dr. Wilkes agrees with Fagge in this view, and they consider that the difference in degree of the inflammation alone accounts for the difference in the symptoms, and that the largest number of cases are due primarily to inflammation of the appendix.

That inflammation may occur in the cæcum as it may occur in any other portion of the large intestine, no one will deny. But we can say from the records of Dr. Fitz that perforation of the cæcum is most rare, for in a most extensive research he was able to find but three cases, and, in these instances, due to foreign bodies. We shall, therefore, with Fagge, consider that appendicitis is the real affection that occurs in the region we are discussing (see Appendix, I.).

A word with reference to the anatomy. The cæcum normally varies much in position as well as in shape. On the blackboard are drawings of different forms of the cæcum, as detailed by Treves in his lectures on the anatomy of the intestinal canal. He thinks that the cæcum is most frequently found, not in the right iliac fossa, but on the psoas muscle itself, or in the pelvis; that the cæcum is entirely surrounded by peritoneum, rather than only partially, and, therefore, that behind there is no areolar tissue, as was described by the older anatomists. He does not believe, moreover, that there is a meso-cæcum.

It is also of importance to note variations in the appendix in the consideration of peri-cæcal inflammation. The usual position, as found by Mr. Treves and Dr. Fitz, is behind the ileum and its mesentery, with the tip pointing toward the spleen. The second most usual position is behind the cæcum, with the tip pointing upward. Long appendices usually take this upward direction. Fitz also refers to its lying on the psoas muscle, with or without the tip in the pelvic cavity, and believes, from recent examinations, this to be a most frequent position. There are other variations in position.

It may stretch across the pelvis and become adherent to the sigmoid flexure of the colon, and in one instance I have seen the appendix in the inguinal canal associated with hernia. In another instance it was adherent to a pyosalpinx (see Appendix, II.). The appendix varies in size, it varies as regards the character of its walls and it varies as regards its contents. It may vary in length from one and one-fourth to nine inches. Here is a famous specimen in which the appendix was nine inches in length. It lay behind the colon, reaching to the under surface of the liver (see Appendix, III.). In cases dying from causes not associated with this region, the appendix is often found as a cord-like body, having been the seat of previous inflammation. It may have a dilatation either at its blind extremity or in some portion of its length, especially pouch-like at the mouth. Sometimes the entire canal is dilated and filled with catarrhal products.

The character of the contents is of importance. Various articles have been found in the appendix, but chiefly fecal masses. Seeds of various kinds, buttons, bristles, worms, shot, pins and gall-stones have also been found. It is in all probability on account of the presence of these foreign bodies that we have the serious secondary symptoms that arise (see Appendix, IV.).

I shall next speak of the morbid anatomy of peri-cæcal inflammation. First, with regard to the manner of making a post mortem examination in such a case. There is usually an extreme degree of peritonitis, and unless the autopsy is made with great care, it will be impossible to find the seat of perforation, if one exist, and the exact conditions and relations of the peri-cæcal inflammation. The easiest method is to begin at the first loop of bowel that is reached and from that unravel the intestines, separating with great care the adherent parts. If a source of obstruction be found, tie the bowel on both sides and examine the portion in situ, opening the gut, if required. Such an examination is absolutely necessary in order to make a thorough study of the part.

Inflammation of the appendix occurs both of the simple catarrhal and of the

ulcerative type. That we have frequent catarrhal inflammation we know from the lessons of morbid anatomy. Clinically, it would be impossible to determine the presence of such an inflammation, however. Catarrhal inflammation with succeeding ulceration, local or encysted peritonitis, and, finally, perforation, also occurs; and the following conditions are generally found after death. In the first place, on section of the abdominal walls, there is found, especially in the right iliac region, an œdematous state of the tissues; not only may there be serous œdema, but there may also be infiltration of pus, due to the burrowing from the primary abscess. The peritoneum, if involved, will exhibit an intense degree of inflammation with the characteristic injection, sometimes general, sometimes limited; and more particularly to the right iliac fossa and the pelvis (see Appendix, V.). Serum will be found in the peritoneal cavity, and in some instances pus; blood is occasionally found. In the more severe forms, especially, large flakes of lymph cover the intestines, the parietal peritoneum and the abdominal organs. The intestines are also more or less adherent to each other, depending upon the duration and the degree of the inflammation. The location of the abscess, for it is usually circumscribed, depends upon the position of the cæcum. There are three positions in which it is most frequently found—either in the right iliac fossa just above Poupart's ligament, or behind the cæcum, or in the pelvis. In a case which recently came under my observation, the abscess was found in the pelvis, one and one-half inches below the level of the psoas muscle, four inches from the anterior superior spine of the ilium on the right side, and two inches from Poupart's ligament. In another case the abscess was found behind the cæcum in the connective tissue of the right iliac fossa. The size of the abscess varies, sometimes containing only two or three ounces of pus, and in other instances as much as a pint or more has been removed. The walls of the abscess differ according to its position. In the first instance mentioned the upper or anterior wall was made up of the cæcum, the right of the pelvic wall, while poste-

riorly and on the left it was circumscribed by the adherent intestine. The walls of the abscess may be made up of the intestines alone. The appendix is always found in the abscess, and has undergone changes varying in degree with the duration and severity of the inflammation. Inflammation and ulceration of the mucous membrane, serous or purulent infiltration of the walls, with perforative ulceration and encysted or localized peritonitis, are discovered. In some instances a portion has sloughed entirely off and cannot be found, having undergone dissolution; in others it is found as a soft mass of necrosed tissue (see Appendix, VI.). The perforation varies in size; sometimes it completely surrounds the appendix, or even severs it in two, or it is sufficiently large to admit a probe only, while even in other instances it can scarcely be detected. Sometimes two or more perforations are found, and frequently they are covered by recent lymph. The canal of the appendix is very often dilated. We usually find in the canal, near the cæcum, a foreign body; it may, however, be found in the abscess. In the cases detailed by Dr. Fitz, foreign bodies were found in sixty per cent. In other cases their presence or absence could not be positively determined, from haste at the autopsy, from their disintegration, or from their discharge into the bowel, so that the proportion is probably larger than stated. There is one point of importance in reference to the surgery of this region, and that is, that the perforation usually occurs within one and one-half or two inches from the colon. Whatever may be the length of the appendix, the perforation is as a rule found at the point just indicated.

There are, of course, many cases which do not terminate fatally. Under such circumstances resolution takes place, or the abscess becomes encysted, it undergoing the usual changes, or ruptures into some neighboring organ. Dr. Bernardy related a case to me where rupture occurred in the upper portion of the rectum and also through the abdominal wall at the umbilicus. Dr. Edwards had a case in which fully one and one-half inches of the appendix had sloughed off; the abscess ruptured into the bowel, carrying with it the portion of

the appendix and a mass of grape seeds, which were discharged together. The abscess may discharge through the abdominal wall, through the scrotum, into the hip-joint, through the loin or the perineum, or in other directions. Sometimes the pus burrows upward, even as high as and into the pleural cavity. I may say that the bladder is a favorite seat for the rupture of such abscesses.

That cure may take place in cases of perforation of the vermiform appendix, this specimen distinctly shows. It was prepared by Dr. William Pepper, and is in the museum of the Pennsylvania Hospital. The patient died of another affection. The appendix was cord-like, except in one place, where an old perforation was seen, with organized blood-clot and lymph on the surface.

These are the chief points in regard to the morbid anatomy of peri-cæcal inflammation. In the first place, that peri-cæcal inflammation is due, in the larger number of cases, to the inflammation, ulceration, and rupture of the appendix vermiformis with the secondary formation of an abscess; that the position of the abscess depends entirely upon the original position of the appendix; that the further course of the abscess cannot be determined; that in the larger number of cases the inflammation and ulceration are due to the presence of a foreign body occluding the canal—a retention inflammation. The sequence of events appears to be as stated; and while it may appear to be a refinement of terms to differentiate between typhlitis and appendicitis, it is almost necessary in order that a correct and well-defined appreciation of the pathology be determined, so that early and proper treatment may be instituted. Unless such a refinement be made, cases of this kind will be frequently treated as simple typhlitis, whereas in sixty per cent., or perhaps a larger proportion, they are cases of inflammation of the appendix.

APPENDIX.

The text is allowed to stand as furnished by the stenographer, and the following notes are presented explanatory in a measure of the text. They are based on the appearance of

the specimens the writer had on exhibition at the meeting, collected from private sources and from hospitals. Some twenty specimens were obtained for this purpose. The writer's best thanks are due to Drs. Pepper, Edwards, Bernardy, Willard, Woodbury, Longstreth, Hinsdale, Seltzer, Daland, Bodamer, and others, for notes and specimens. Some excellent descriptions may be seen in the Catalogue of the Museum of the Pennsylvania Hospital.

I. Strictly speaking, we should say the sequence of typhlitis, perityphlitis, and peri-cæcal abscess occurs but rarely. A typhlitis and perityphlitis, no doubt, are seen clinically, but the cases do not come to the post mortem table unless perforative appendicitis occurs conjointly. For this reason, and because a similar sequence of lesions does not obtain in similar inflammations of the large bowel under like circumstances, as fecal impaction from stricture, or from paresis in the aged or after typhoid fever, the pathologist may well doubt the existence of perityphlitis and succeeding peri-cæcal abscess. Moreover, in the more violent inflammations of the gastro-intestinal tract, in gastritis, enteritis, or in dysentery, such sequential lesions are not found.

II. *Case I.*—Matilda Thomas, aged one hundred and four years. Cause of death, exhaustion from strangulated hernia. (Abstract from autopsy record, Philadelphia Hospital.) Abdominal cavity; no effusion; adhesion of large and small intestine; appendix dilated to size of first finger, end of it incarcerated in inguinal canal, with portion of mesentery and small intestine; owing to post-mortem discoloration, color of parts could not be determined; local peritonitis; in canal and layers of muscles and fasciæ considerable amount of greenish pus; the portions outside of canal adherent to the bladder, uterus, and ovary, the latter being included in the inflammatory mass. Organs occupy normal position. (Musser.)

Case II.—Philadelphia Hospital. Female, aged twenty-two years. Appendix four inches long, dilated to size of finger, contained mucoid fluid, adherent to a large pyosalpinx. (Musser.)

III. From Museum of Pennsylvania Hospital, described by Wistar. (See

Catalogue of Pathological Museum, 1869.)

IV. Cranberry seeds (Mears). Fecal concretions (Hartshorne, Daland, Hinsdale, Seltzer, Musser). Grape seeds (Edwards, W. A.). A concretion one-half inch long and one-quarter inch thick, cone-shaped, apex pointing toward the perforation in the appendix, base concave, firm, fecal color and odor, in mass of which black bodies, size of cranberry seed, were found. It completely occluded the canal, causing retention of the natural secretion, inflammation, ulceration, etc. The perforation was one-eighth inch from the apex of the concretion (Musser). A phosphatic concretion in Mütter Museum (Woodbury).

V. General peritonitis (Woodbury, Willard, Hall (Mütter Museum), Bodamer [Case I.], Seltzer, Pepper [1637 Pennsylvania Hospital Museum], Longstreth [Pennsylvania Hospital Museum Catalogue, No. 1368¹⁰], Meigs [Pennsylvania Hospital, 1366], Bernardy, Musser. Local peritonitis (Mears, Pepper, Hinsdale, Bodamer [Case II.], Hartshorne, Musser).

VI. Two inches of the appendix necrosed, slate-gray color, soft, floated in the pus, attached slightly to the healthy stump (Musser). Appendix sloughed off. Male, forty years. Peritonitis fourth day (Bodamer, Case I). Appendix one and a half inches long, ulceration one inch from bowel, a few lines in diameter. No communication between appendix and cæcum. Gelatinous mass in appendix (Bodamer, Case II.). Appendix removed by amputation, was attached by its blind extremity to omentum, also removed. Length two inches, one inch occluded by concretions, and one dilated and empty (Woodbury, Mütter Museum). Appendix two and a half inches long. Ulceration three lines in length and two in width, half an inch from extremity. Canal not dilated. Walls not thickened (Willard).

Mütter Museum, College of Physicians of Philadelphia, A. D. Hall. V. A., cæcum and portions of ileum, perforation, peritonitis, death. When recently examined a perforating ulcer of the appendix was found, through which a grooved director could be passed,

communicating freely with the peritoneal cavity. There are two perforations, one, 2.5 centimetres from the caput coli, the muscular coating of the appendix appeared to have been destroyed by ulcerations, and then the peritoneal coat had given way in three small openings about 2 millimetres in line. These were arranged in a triangular manner. The second was a solitary perforation, 4 centimetres from the end of the appendix. Although thick patches of lymph had been thrown out, no attempts to limit the effusion of foreign material by lymph barriers was discoverable. There was nothing to show that any foreign body or concretion or impaction had been the origin of the lesion. Fluid pus was found in the interspace between liver and stomach, and about six ounces of turbid serum were in pelvic cavity. The intestines were glued together.

Mrs. C., aged twenty-five years, mother of two children, youngest four months old. Death on fifth day of idiopathic peritonitis, with characteristic symptoms.

Catalogue of Mütter Museum, College of Physicians, E. Hartshorne. Appendix, gangrene and perforations. Recently observed the appendix was inflamed and greatly enlarged, and intimately adherent to surrounding parts; was distended to a sac 5 centimetres long and two centimetres broad, and communicated by a small opening with the cavity of head of colon; walls thickened, infiltrated with dark blood and serum; its peritoneal coat highly injected and covered with exudation, and the mucous lining showing traces of extensive inflammation, which had run into a superficial gangrene. The latter had produced a honeycombed appearance of the inner surface, and had covered it with a dark greenish, pulpy, and extremely fetid matter. On its side; about two-thirds of the distance from the cæcal extremity, an ulcerated perforation, some 6 lines in length, and 3 lines in width, was found, from which fluid fecal and other matter had been flowing in small quantities. Immediately behind this opening, and encased by the appendix, a peculiar, moderately hard concretion, of the shape and color of an elongated olive

stone, presented itself, having been apparently moulded by the cavity by which it was contained. This was in layers, and was probably hardened fecal excrement which had accumulated by slow oozing of the fluid contents of the large intestine through the small orifice of the distended appendix. No other evidence of morbid action in abdominal cavity, except congestion and œdema of ovaries and fimbriated tubes. Death on the fifth day from peritonitis.

A PHENOMENAL FEVER CASE.

BY WILLIAM R. D. BLACKWOOD, M. D.

THE subject of this report was a young lady nine years of age, of very slender build, pale complexion, and a highly developed nervous temperament. She ordinarily had a capricious appetite, and disliked butter, fat, and milk so much that she had to take cod-liver oil and glycerine in the winter months. She inherits this peculiarity from her mother, to whom butter is almost a poison. Her appetite for sugar and mustard was good; the latter she would, if permitted, eat on bread as others would eat butter or preserves. She also liked salads with vinegar, and acids generally. She was always at the head of her classes at school, and learned her lessons without study at home. A tendency to subacute chronic gastritis existed for five or six years, and she often complained of pain during or after meals.

THE HISTORY BY DR. BLACKWOOD.

Miss H. D. B. was indisposed from about the fourth of August, and took to bed on the eleventh. At first she was thought to have a bilious attack, and was given a little calomel and citrate of magnesia. This did no good, and by the 14th her temperature went up to 106.4°. It was not recorded before this time, but it has been watched closely since then. Ordinary febrifuges, such as aconite, nitre, acetate of ammonia, etc., did not act; her skin was perfectly dry throughout, until September 20th, when she had a drenching perspiration. What follows is from daily notes.

Fearing the effect of an almost continuous temperature of 105°, it going

down little more than half a degree at any time, I prescribed seven grain doses of antipyrin every three hours on August 16th, and this not acting on the 18th it was increased to fifteen grains, with the effect of bringing the rate down to 103.5° for half an hour only; but toward tea-time of that day she showed evident signs of collapse, blue extremities, cold feet, and slowed respiration. Stimulants removed these threatening symptoms in an hour or so. *Her fever, all except the half hour noted, remained at 105°!* Ice-water sponging had all this time been used freely, or water, bay rum, and vinegar over the entire person. On the 19th, antifebrin in five grain doses was given with the result of a *rise in the temperature* during the day to 105.5°, and during the night of that date the dose was increased to ten grains every three hours. Under this the rate remained close to 105°, as it sometimes rose a fifth or fell a like amount, and her stomach became much disturbed; vomiting set in. It was discontinued, and her vomiting ceased. This was my first and only experience with antipyrin and antifebrin.

Dr. O'Hara saw her on August 20th, and she then presented, so far as pressure indicated, symptoms of colitis over the whole length of the large intestine. She had very little diarrhœa, and the stools were mainly normal in color, and not thin. A little mercury and chalk was ordered for a day or two, but no change took place for the better. Her pulse varied from 112 to 120 (and this was its rate throughout), but the respiration was nearly double her normal rate and very shallow; no cough and very slight rales at the back. Febrifuges of about the former nature were resumed on the 22d, and muriate of ammonia added to the evaporating solution. The temperature varied only a quarter or one-half a degree steadily till September 4th, when, Dr. O'Hara being out of town, Dr. Frank Woodbury saw her, and he united with Dr. O'Hara and myself in the treatment of the case. To the fever mixture was then added spirits of chloroform, and an ice-cap was worn continuously. The abdomen was now tympanitic, and a single *tache-rouge* was detected on the

back, at the lower border of the right ribs. This was first observed in the fourth week, it will be noted, and nothing of the kind appeared sooner. No sudamina. Five drops of turpentine were given every four hours, and brandy alternated with the dose. The tympanites disappeared in twenty-six hours, and the turpentine, as it nauseated her, was discontinued. Thermometer now 105° from 10 A. M. till 4 next morning. Between 4 and 10 A. M. it fell under thirty grains of quinine, by suppository, to 103.5° . As her diet was insufficient to keep up her strength under the destruction of tissue by the temperature, I gave her, on the 6th, thirty grains of quinine sulphate during the day in compressed pill form. For two hours the thermometer in the evening was down to 103° . The quinine kept the fever in the early morning down for three days, when the stomach again rebelled, and suppositories were substituted of muriate of quinine with aqueous extract of opium—forty-eight grains daily of quinine being thus used. Less would not control the fever for even one hour, and this course was continued until the evening of September 13th. I lessened the dose to ten grains next day, and by midnight the height was 105.5° again. From this to the night of the 17th she had forty grains daily, and the temperature now reached 103° at nine P. M., and then going down to 101° by daylight, at which it stayed till three P. M., when it began rising.

On September 18th, Dr. Henry H. Smith saw her, and as she looked pretty well he considered her convalescent. He suggested a little digitalis with the opium. I may say here that she never showed any emaciation of the face, any pinched expression of countenance, any dry, brown, or glazed tongue. Her tongue was occasionally a little white in the middle, but always moist. No sordes appeared at any time, and she never asked for water until after the perspiration on the 20th of September. She drank only a teaspoonful or so after any medicine, and she took little liquid, except small quantities of beef-essence, soup, orange-juice or milk; but she excreted urine plentifully. On the 22d, her morning temperature was normal, but it went up to 101.5° in the

afternoon, keeping thus till the 27th, when it dropped to 99.5° in the afternoon.

From this on she gradually improved in appetite and strength, and she is now, October 1st, sitting up dressed for half the day. During the whole illness her voice was strong, seldom tremulous, and she lay awake all day. She slept well every night without anodynes, her hand trembled little at any time, the stools were not typhoid dejecta, and the urine was perfectly normal. She had a little nose-bleed a few times; but she often has that in health. There was a few times some membranous discharge from the bowels, slightly tinged with blood; no fever from sepsis could be detected any time, but that reflex irritative fever prevailed (possibly from unhealed ulcer of the bowel) was evident. On the day after Professor Smith's visit I gave her a pill of silver-nitrate with opium four times daily, and kept this up till the 26th. This may have stimulated cicatrization of the ulcers, if such were present. From this she improved rapidly, and she has since been free from any pain.

REMARKS BY DR. M. O'HARA.

My view of the case is substantially that set forth by Dr. Blackwood. The attack at first was apparently one of portal congestion, leaning toward dysentery. The continued high temperature may have been due to unhealed ulcers, causing reflex irritation, or there may have been some obscure disturbance of the brain heat-centres. In such a delicate child the condition was alarming under such deficient alimentation. The only real febrifuges appeared to be alcohol and quinine. For two days I felt grave doubt of recovery, although there did not seem to be any toxic trouble, at least from sepsis.

The worst two cases lately in my charge were those where very high fever existed for two weeks, but then convalescence was rapid, and almost without treatment, except Nature's firing process, as the parents refused absolutely to give the children repulsive medicine, and still Nature managed the cases perfectly well. Sometimes the fever does not seem to burn

up the poison causing disease. In old times we had alarm from chimneys taking fire, but the soot was gotten rid of thus and no harm was done. So in many fevers. We don't know what fever really is as yet, and we ought to be careful with such drugs as antipyrine and antifebrin. They are, of course, valuable, but require discriminating judgment in what individual case to use them.

In three cases of clergymen under my care at Atlantic City, where the cause, which was the same in each and started at the same time, was believed to have been eating oysters, all were typhoid in appearance; yet one recovered in a day or two, having only a little castor oil; another went nineteen days with slight rise in temperature and towards the close alarming collapse and copious sweats, leaving him weak for twenty days more. The third was sick for thirty-five days, had continued, but not alarming high temperature, yet both the latter got well finally about the same time. Atypical forms are frequent, and many cases considered typhoid are really not such, their true nature being unknown.

The thermometer tells us the disturbance of the mercury by the fever, but it does not measure the quality or quantity of the heat, or reveal to us what is the exact nature of the disturbance in the human economy, just as we have tension and quantity in electricity. The most serious and fatal cases do not have the very high temperatures, but rather moderate temperatures. My experience enabled me, by exclusion as to all other causes, to assign this to the category of typhoid fever; but it seems strange to me how numerous have become the cases without well-defined pathognomic symptoms. Our adherence to the word "typhoid" shows we do not know all about it, yet enteric fever scarcely gives us a better idea of what is going on in this class of diseases. I believe there are many cases where the patients get well, never having taken to their beds. There must be variation in the seed of typhoid fever, or some varying character in the human soil in which it is planted to give us so many different forms of typhoid fever. It is

constantly mistaken for malarial fever, and I think it sometimes exceedingly difficult to recognize on account of the absence of pathognomic symptoms. I have seen one case, a walking case, where it was not even suspected, in which latent ulceration of bowels went on and the patient died from hemorrhage. A post-mortem diagnosis was made in this case.

NOTE BY DR. WOODBURY.

The general impression which was left upon my mind, and which is confirmed by reading the notes carefully taken by Dr. Blackwood, is that the case beyond all doubt was a case of continued fever. But to the question, "Was it a case of typhoid fever?" I cannot give such unqualified assent, although the prolonged fever, early epistaxis, profound prostration, dislike for food, scanty rose-colored eruption, and troublesome colitis, with slow recovery, seem to admit this explanation better than any other; yet it was very different from the ordinary type of the disease. Despite the constant elevation of temperature, which had been observed for weeks prior to the time that I saw the little patient, she did not have the brilliant eye and flushed cheek, the fever-breath and coated tongue, nor the dry, harsh skin of developed typhoid; and, indeed, there were also absent two very important and characteristic signs: the pea-soup dejections and enlarged spleen. She did have a few dry, bronchial rales upon which Prof. DaCosta lays much stress as one of the important early signs of typhoid fever. I found her weak and thin, it is true, but intelligent, patient and fully conscious of all that was going on around her. At this time her temperature had been brought down to one hundred and three, or a fraction over, and she appeared as if ready to enter upon convalescence, provided that sufficient nourishment could be administered and assimilated. For a time she improved decidedly under daily inunctions of cocoa-nut oil and massage, with small quantities of yolk of egg and brandy given frequently. Subsequently, she was able to take rice-water and mutton-broth, and was

apparently doing so well that I considered her convalescence assured; and as I was called away from the city to attend the International Medical Congress, I did not see her again for nearly a month. When I returned she was sitting up, having had a very tedious recovery. I learned from Dr. Blackwood that, after I had stopped meeting with Dr. O'Hara and himself, the temperature again rose to 104° , and remained so for several days. For this aberration of temperature, there was absolutely nothing to account, unless the persistent tenderness, swelling and induration of the abdomen, in conjunction with mucous, slightly bloody discharges from the bowels would suggest the influence of irritable, unhealed ulcers in the lower part of the small intestines, or in the colon, a view in which Drs. O'Hara and Blackwood coincided. There was, at no time, any symptom of pneumonia, nor of cerebral disorder, so far as I could learn. The patient was most assiduously attended by her mother and father, and it is owing to the unusual care that she received that she strove successfully against the disease. She was also fortunate in descending from a stock distinguished by superior vitality and energy, and in which the Scotch element did not dispose her to readily yield to the mandates of disease or of any thing else.

RESUMED BY DR. BLACKWOOD.

Since writing the above, the patient had a relapse (on Oct. 6th), the fever running up from sub-normal in the early morning to 104° at 2 P. M. and this point being held till 6 P. M., after which it slowly declined till before daylight, when it varied from 97° to 98° . The relapse lasted six days. No cause was known for the condition. The abdomen a few days *after* recovering from the relapse became tumid and dull on percussion all over. There was probably some effusion, as the dulness was more pronounced when standing. The circumference was increased three inches over the normal size for a week, and then it gradually disappeared. The urine was all right throughout, and the stools, also, both in character and amount. Nothing was prescribed

other than two grains of quinine before meals, and this was maintained to November 1st, when she was able to ride out. She has been almost altogether free from gastralgia since, and her appetite is ferocious. She is stouter now than before her illness, and despite the fever her hair, which was usually thick and long, comes out but little, and desquamation was unimportant.

There may be cases like this. I never have seen one before. I have treated typhoid in army and civil hospitals, and in private practice to my full share, and I have seen high temperature, but never a continued fever of this grade. The rate kept up within a fraction of 105° for over five weeks steadily, day and night—any drop being less than a degree, except for less than an hour on one occasion. For over fifty days her fever was never below 103° in the afternoon, and hardly less at any hour during the rest of the day or night. Five guaranteed thermometers were used, and mine are accurate, I know. There is no mistake about the data; they were carefully noted day by day.

Typhoid in India is said to be followed frequently by relapses of persistent fever, quite high, though morning temperature may be sub-normal.

Either we are mistaken about the danger of continued high temperature (and 103° – 105° is high when held for a month) and the fatty degeneration thus induced cannot be common, or else this child is a phenomenon in withstanding fever. If this was an atypical typhoid, it is worth reporting; if it was not, what was it? Wasn't it phenomenal?

246 North Twentieth Street, Phila.

REPORT OF THE COMMITTEE ON PROF. KOROSI'S PAPER ON VACCINATION STATISTICS.

Presented to the First Section in the Ninth International Medical Congress, Washington, September 6th, 1887.

IN connection with his paper on vaccination statistics, Doctor Korosi of Buda-Pesth presented a number of documents, referring to the well known and much quoted statistics which were published fifteen years ago by Doctor Keller, the chief physician of

the Austrian State Railway. These statistics were amongst the first which dealt with the influence of age upon small-pox mortality. The most astonishing result of these statistics was that, by omitting children under one year of age both from the vaccinated and from the non-vaccinated, no influence of vaccination was to be observed, as there died amongst the vaccinated people $13\frac{3}{4}$ per cent. and amongst the non-vaccinated $13\frac{1}{4}$ per cent. But for some ages, there was to be found even a greater mortality amongst the vaccinated. For instance, the deaths between ages from 4-5 years among the vaccinated were 20 per cent., but from the non-vaccinated only 15 per cent.; from 5-10 years among the vaccinated 19 per cent., but from among the non-vaccinated only 9 per cent., so that these data appeared to prove not only the uselessness of vaccination, but even the danger of it.

Let us add that these statistics, especially in consequence of the well known discipline of the service of the said railroad company as also in consequence of the very careful arrangement of the schedules, were much praised.

The anti-vaccinators, especially Lounser of Vienna, and Professor Vogt of Bern, Switzerland, declared them to be the most carefully prepared and the most trustworthy of vaccination statistics.

These data were also quoted everywhere, when vaccination was to be attacked; and even in the German Parliament, the leader of the opposition, Reichensperger, quoted these statistics in order to combat the German vaccination act of 1874. These statistics have thus done, and still do, much harm to the cause of vaccination. Director Korosi, having undertaken a critical review of all the statistical methods which were used up to the present time in defence or in attack of the preventive power of vaccination, had also resolved to examine some of the most important anti-vaccinational papers, step by step, to pursue each quoted statistical fact back to its original source, and to ascertain in this manner its reliability. Amongst these papers was included that of Keller. When Korosi undertook this trouble-

some work of investigation, which occupied him for some months, and necessitated an extended correspondence and compelled him even to make journeys, he had no suspicion that these statistics had been falsified, and he expected that he would be obliged to acknowledge their exactness, exceptional as they were. But the result of this investigation terminated in a quite unlooked-for development.

Korosi having addressed himself first to Dr. Keller to allow him to come to Vienna to revise the original schedules, found that Dr. Keller had died not long before. He went, however, to Vienna to look into the matter. Here he learned from the successor of Dr. Keller, Dr. Neumann, that Keller had retired from office two years before his death, and that he had taken with him all these official papers. Keller having died in the city of Klosterneuburg, without family, Korosi sought for the documents, but in vain, as all the property had been delivered to kinsmen residing at Prague. Korosi addressed himself now to these, but learned that no statistical papers had been found among his effects. It is then probable that Keller had himself disposed of these important documents.

The correctness of these statements has been verified by us by examining the letters of Doctor Neumann, of the Burgomaster of Klosterneuburg, and of Professor Erben at Prague, the latter having made inquiries of the heirs of Keller.

Director Korosi having thus far been baffled in his search, addressed letters to all the railway physicians who had furnished, in 1872-3, statistics to their chief at Vienna, asking them if they had duplicates of their statistical reports. Out of 19 physicians still living 8 were able to send duplicates, and Director Korosi was thus enabled to reconstruct the railway statistics of 549 cases of those reported in Keller's brochure.

Before presenting to the section the results of our labor, we desire to say some words as to the accuracy of the original reports. Far from being perfectly accurate, it must be admitted that they are the very opposite, and that in the following respects:

1. The alleged superiority of the Keller's statistics was ascribed to the circumstance that, according to the circular order No. 30,593, 1872, of the Vienna office, the physicians had to note, during the epidemics of 1872-3 in each case of small-pox, not only whether the patient had been vaccinated or not, but also whether he had been re-vaccinated, if he had small-pox before, or if vaccination could not be ascertained, and, besides all this; the age, and this with great exactness. Thus, for instance, in case of sucklings under one year, the number of months. Now we have had in our possession this circular No. 30,593, and have found that its date is toward the end of the year, that is the 19th of November, 1872. How could these physicians have furnished all the required statistical data concerning the persons who had been treated during the time before this ordinance had been published, especially when we take into consideration that the working people on the railway represent a very fluctuating population? The required data could have been possible only if the register of patients had contained columns for indicating these data. But we have had in our hands a duplicate of these older registers in the handwriting of Doctor Borbely, chief physician of the Hungarian lines of the said railroad company, and we can affirm that they contain no column for these data, and that, consequently, this extract of the register of Pesth, containing all the cases of small-pox, which had occurred there in these two years, shows that in not a single one of these cases had the fact of vaccination, re-vaccination, etc., been noted.

2. The fact that the physicians knew very well that the chief medical officer was an anti-vaccinationist renders it not unreasonable to infer that they acted under pressure. We have also seen the letter of one of these physicians, who confesses that, "*inter nos sit dictum*, the data were prepared in conformity to the taste of their chief, whom he knew to be opposed to vaccination." We can thus state that the much-praised source of the Keller reports has been found a very impure one.

But even these inexact statistics furnish a proof in favour of vaccination. The data reconstructed by Director Korosi lead to the following results:

Of the vaccinated, died - - - 8.82 per cent.
 " not vaccinated, died - - - 19.23 "

That is more than double the number of the former.

From the paper read by Korosi, in the I. Section, we learn that in 19 Hungarian hospitals, where the registration was exact, eight times as many of the not vaccinated died as of the vaccinated; but the incorrectness of these railway statistics causes this advantage of the vaccinated to be reduced one half, whilst under the hands of Doctor Keller this advantage was reduced to zero. How was this accomplished? We beg to tender you the explanation of this fact: Keller had actually altered the statistics of his physicians, which he should have only compiled.

Let us give only one instance: The railway company is proprietor of a great mining colony, called Steyesdorf, in the south-east of Hungary. The physician of this colony, Doctor Pichler, sent to Director Korosi a duplicate of his statistics, according to which there had died out of the vaccinated 3.8 per cent., but, out of the non-vaccinated, 34 per cent.; that is nine times as many.

In Doctor Keller's paper we find it reported thus: There died amongst the vaccinated, 49 per cent.; amongst the non-vaccinated, 20½ per cent.; so that the difference is simply quadruple. This result was produced by raising the number of the deaths in the column of the vaccinated, and by changing in the same direction the number of the patients. For Doctor Pichler reported that amongst 38 not vaccinated, 13 died—34 per cent.—and Doctor Keller changed this in the following manner: Amongst 68 not vaccinated, 13 died—20½ per cent.

From the correspondence submitted to us we find that Korosi informed Dr. Pichler of the great discrepancy between these two statistics; he called his attention to the fact that, in the trial, Keller *versus* Jenner, Keller ought to be impeached for falsification of statistics; that he (Doctor P.) would

be in the witness box before the tribunal of an International Congress; that he should, therefore, revise his registers once more, and perhaps he would find some mistakes. We have seen the answer of Doctor Pichler dated from Steyesdorf the 4th March, 1887, in which he says that he did not know anything about the paper of Keller; and declared that his own data are true, and accord entirely with his registers of sick and dead. Besides this, it may be mentioned that Doctor Pichler also had sent in 1873 his statistical reports to the country authority at Lugos, so that the possibility of errors is entirely excluded from his own data.

But your committee have also had in hand the answers of all the other physicians of the railway company, in all eight letters. We are convinced that in each of these, *without exception*, that Dr. Keller had changed the genuine data, and that always in such a manner as to increase the mortality of the vaccinated, and to diminish that of the non-vaccinated. We further aver that in some cases, *e. g.* as in that of Olmutz, where all the patients had been vaccinated and all recovered, Dr. Keller simply omitted all mention of the report and of the facts. For we have sought in vain for the statistics of Olmutz in Keller's brochure.

In conclusion, we are forced to declare that the statistics of Doctor Keller have been found by us to be false; that these statistics are an unpardonable effort to mislead public and scientific opinion, and that henceforth no weight should be attached to them, having been proved by us to be entirely incorrect.

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A. B. ARNOLD, M. D.,

President of Section of General Medicine.

Extract from the Minutes.

WM. F. WAUGH, A. M., M. D.,

Secretary of Section I.

A CASE OF EXTRA-UTERINE (EPI-OVARIAN) PREGNANCY; DELIVERY OF THE FETUS THROUGH AN ULCERATED OPENING IN THE ABDOMINAL WALL; DEATH; AUTOPSY.

(Clinical Report from Maryland Woman's Hospital, Baltimore.)

Service of the late PROF. A. F. ERICH, M. D., of the College of Physicians and Surgeons, Baltimore.

MARY E. CANNON, colored, aged 35 years, widowed since February 12th, 1880, was admitted into the *Maryland Woman's Hospital*, April 4th, 1881, and gave the following history:

Her menses first appeared when she was fifteen years of age, and continued normal in amount, duration and interval until her marriage, in her 25th year. She has led an active life, her occupation being that of washer and ironer. She has had seven children, two being still-born at full term. She had no abortions. Her health usually had been good.

In the latter part of February, 1880, she noticed that her abdomen was growing larger, and in the course of a month or two later felt "tapping-movements" in the left side, which she attributed to the movements of a fetus. Six months later she had violent colicky pains, and a hemorrhage from the uterus. The pains continued severe at intervals, "sometimes drawing her almost double," as she expressed it, until the latter part of October, 1880, when a brownish fluid began to ooze from three small openings around the umbilicus. The apertures were arranged in a triangle around the umbilicus, and were about the size of small shot. These openings gradually enlarged, and the structures of the anterior abdominal wall, for a space of about two inches in diameter, finally sloughed out, leaving an opening through which a portion of the fetus could be seen. The discharge continued, and rapidly became very offensive, the odor at the time of her admission into the hospital being almost insupportable to the attendants.

The following notes were made of her condition on admission:

The patient is moderately emaciated; temperature, 98.8°; pulse, 98; respiration, 20. Appetite and digestion moderately good, with a tendency to constipation. She has a moderately enlarged abdomen, with the physical signs of an irregular, solid tumor. The site of the umbilicus is occupied by an ulcerated opening about two inches in diameter, through which presents a portion of the fetus, believed to be the knee. A very offensive discharge issues from the ulcerated opening, which, as stated above, has existed since last October.

On April 5th, the day after her admission, she was etherized, and, by careful manipulation, a full-grown, but considerably macerated and partially-decomposed fetus was removed piecemeal, without further enlarging the ulcerated opening in the abdominal wall. The presenting part was found to be the hips, instead of the knee, as at first supposed. The scalp was found to be firmly adherent to the bottom of the sac, and was carefully removed. No trace of placenta could be discovered.

After removing all the contents of the sac which could be detached from its walls with safety, the cavity was thoroughly washed out with carbolized water (one per cent.), and then packed with carbolized cotton, thickly dusted over with boracic acid to prolong the antiseptic effect, and a bandage applied over all. She was then put to bed, and the benzoate of sodium mixture (R: Acid benzoic, 3j; sodii biborat, 3iss, ad. aquæ, f3vj) given in teaspoonful doses every hour.

On the 6th, 7th, 8th and 9th, she was easy, with a temperature varying from normal to 99.2°. During the night of the 9th, she awoke in a profuse perspiration, but soon went to sleep again. On the morning of the 10th the temperature was 98.8°, and at 4.30 P. M. it had risen to 100.8°. The membranes had slowly come away in flakes during the preceding four days, and now disclosed a spongy tumor—the disorganized placenta—attached to the left side of the sac. This was removed without causing any hemorrhage. The attachment was not firm, and the placental site remained as a rough, somewhat villous surface.

The cavity had been thrice daily washed out with the carbolized water, and was kept packed with carbolized cotton. The latter was now thickly dusted with boric acid crystals to render the antiseptic effect more permanent. On the morning of the 11th the temperature of the patient was normal. From this date until the morning of the 15th, inclusive, the temperature varied between 98.8° and 98.2°, standing at the lower figure on the latter date. Owing to extra work at the hospital on this day, the afternoon dressing of the sac was omitted, and at 11 P. M. the resident physician was surprised and alarmed at finding the temperature 104.2°. The cavity was at once thoroughly washed out with a two per cent. solution of carbolic acid, packed with borated cotton and twenty grains of cinchonidia administered. In half an hour the temperature had fallen to 103°, and at 12.30 A. M. of 16th to 102°. At 10 A. M. of 16th the temperature was 103°. The cinchonidia was repeated, and the sac washed out and packed with the borated cotton every two hours.

On the 17th, the temperature ranged from 101.8° to 104.4°. The stomach had become irritable, and would not retain food or stimulants. During the 18th she rapidly sank, and at 8 P. M. died.

The following is the report of the post-mortem examination, which was made by Professor Rohé three hours after the patient's death:

"The body was moderately well nourished; no rigor mortis.

"An opening was found in the linea alba involving the umbilicus, and extending two inches toward the pubes.

"The skin and subcutaneous connective tissue were dissected off from the fascia and turned back on either side, isolating the opening above mentioned. The subcutaneous layer of fat was well developed, being fully half an inch in thickness. There was inflammatory infiltration of the subcutaneous connective tissue. In the neighborhood of the opening before mentioned, the epidermis could be stripped off in flakes as if it had been macerated in a mild caustic solution.

"The opening in the abdominal wall was found to end in a sac capable of holding about three pints. On entering the abdominal cavity, the omentum, right lobe of the liver, gall bladder and small intestines were found firmly adherent to the sac. The adhesions were so firm that the lower border of the liver was divided with the knife in order to avoid rupturing the sac. In detaching the small intestines, the sac was accidentally opened in spite of the care used.

"At the lower portion of the sac the adhesions were not quite so firm as at the upper. The appendix vermiformis was adherent to the right side of the sac. The rectum was firmly adherent, with considerable vascularization to the posterior surface of the lower portion of the uterus and the vagina.

"The heart and lungs were normal. The kidneys were not examined.

"The sac was removed with the ovaries, tubes, uterus and vagina, and on closer examination exhibits the following peculiarities: It is adherent to the front of the uterus, which is slightly enlarged. The left ovary is normal in size and appearance, and shows the remains of a corpus luteum.

"The right ovary is smaller than normal, closely attached to the sac and displaced upwards; it also contains the remains of a corpus luteum. Both tubes can be traced outward from the uterus, and are apparently healthy. The interior of the sac shows on the left side an annular, rough, villous surface, probably the placental site. On the right side the cavity is irregularly smooth, like an abscess wall.

"From the close adhesion of the sac to the left ovary, and the slightly diminished size of that organ, the case seems to me to be properly described by the designation, *Epi-ovarian*, (ovarian, of Schröder), the ovum having been fecundated on the surface of the ovary and developed in that situation. The thick sack is evidently principally composed of fibrinous exudation, which has undergone organization and formed a pretty stout protective covering for the fetus."

[These notes, prepared by the late Professor Erich, and found among his papers, are kindly furnished by the Associate Editor, whose careful report of the autopsy adds interest to this peculiar and interesting case.—Eds. P. M. T.]

CLINICAL NOTES.

IN CASES OF BLEPHARITIS, Prof. Keyser has excellent results from his "po-made anti-blepharitic:

Oleopalmitate of lead.....	20 parts.
Almond oil.....	10 "
Simple cerate.....	5 "
Balsam of Peru.....	1 "
Liquid tar.....	$\frac{1}{2}$ "

Spread a cloth with this and allow it to lie on the inflamed surface each night.

ACNE.—Prof. Shoemaker prescribed for a case of seborrhœa sicca, accompanied by acne, conditions frequently seen in youth:

R Calcis sulphuratæ.....	gr. $\frac{1}{2}$
Ext. calami.....	gr. $\frac{1}{2}$ M.

Make into a pill. Take three times a day.

Apply locally:

R Extracti hamameli. dis. fld.....	f℥j
Hydrargyri chloridi cor.....	gr. viij
Aque.....	f℥j iv M.

IN STRICTURES that resist dilating by ordinary means, Prof. Garretson frequently succeeds in passing the bougie by first injecting some bland oil into the urethra.

LATE SYPHILIS AFFECTING THE NERVOUS SYSTEM.—An interesting case was exhibited at Prof. Woodbury's clinic, January 9. Three weeks before, the same patient, a man of fifty years, had applied for relief. He had paresis of the legs, pains in back of head, was unable to pass water without a catheter and had impairment of memory. For two years and a half he had been making the rounds of the hospitals, but with no success. Specific treatment was given him of gr. $\frac{1}{2}$ hydrarg. bichlor., and gr. iv of iodide of potassium, ter die. In four days the retention of urine ceased, and on the 9th of January the patient waxed eloquent for joy, saying that the various pains had left, that his memory had come back, and that his strength had returned to such a degree he was shortly going to work.

IN CASES OF HYPERIDROSIS, advise constant use of water on the spots, with or without naphthol, tar, soap, soda, or corrosive sublimate. Dust on the surface salicylic acid and bismuth, equal parts, or naphthol, gr. xx, boric acid, ℥ss. If the powder cakes, remove with sweet oil. Do not cover too warmly.—PROF. SHOEMAKER.

WHEN rheumatism seems to have finally settled in a certain joint, try this: Wrap around the affected part several thicknesses of flannel, first soaking them in cod-liver oil. Encase this in oiled silk; and each day remove the silk and pour on a teaspoonful of the oil.—PROF. WAUGH.

PROF. GOODMAN exhibited at his clinic, at the Medico-Chirurgical College, a patient on whom he had operated at Will's Eye Hospital, for a malignant growth in the orbit and the antrum. The contents of both cavities were removed, and the exposed surfaces seared with a hot iron. Dr. Ziegler, the house physician at Will's, undertook to fill the orbit by means of "sponge grafting," and when the patient was exhibited, the process was well under way, the orbit being half filled with new tissue. The part yet unfilled Dr. Ziegler keeps constantly plugged with bichloride gauze, soaked in boro-glyceride.

PROF. PANCOAST showed at his clinic, a few weeks ago, a case of restored hip-joint. In this case, that of a young woman, the femur had been dislocated into the thyroid foramen, and had there become ankylosed. The femur was much everted and displaced laterally, causing great deformity. Last spring Prof. Pancoast dislodged the neck of the femur, put the bone in place, and the operation has resulted in an excellent joint, with the leg in proper position.

IN THE WOMAN'S HOSPITAL, acute rheumatism set in as a complication after removal of suppurating cervical glands. The case was treated by sodium salicylate and antipyrin internally, with flying blisters applied to the affected joints. The attack was very severe, but the patient made a good recovery, without any heart complications or sequelæ.

ECTHYMA.—For a case of ecthyma, Prof. Shoemaker prescribed:

R Camphoræ.....gr. xx
Ung. plumbi subacetat.....
Zinci oxidi benzoat.....āā 3 ss M.
Sig.—Apply locally.

R Syr. phos. comp.....f3 ij
Syrupi ferri iodidi.....f3 ij
Aloini.....gr. ij M.
Sig.—3ij four times a day.

VENEREAL WARTS.—Dr. McConnell makes use of the following application for venereal warts on the *penis*, when the patient will not submit to operation:

R Pulv. sabinae.....
Hydrarg. chloridi mitis....āā 3 ss
Bismuthi subnitrat.....3j M.
Sig.—Apply locally.

FOR FETID FEET.—Since the offensive odor from certain persons' feet has been shown to be of microbic origin, Prof. Gerhard advises several applications of bichloride of mercury, $\frac{1}{1000}$ or $\frac{1}{10000}$.

TONIC FOR STRUMOUS PATIENTS.—Professor Garretson says that he has frequently found the following to be an excellent tonic:

R Hydrargyri chloridi corrosivi..gr. ij
Tincture gentianæ comp.....f3 ij M.
S.—Teaspoonful ter die.

PHILADELPHIA HOSPITAL.—In ligaturing the broad ligament for the removal of the Fallopian tubes and the ovaries, Dr. Parish claims that Tait's Staffordshire knot is unreliable, on account of its tendency to slip, and recommends instead the double ligature passed through the middle of the broad ligament and each half tied separately.

GERMAN HOSPITAL.—Dr. Vogler presented a patient who suffered with paralysis of the left side, due to rupture of a blood-vessel in the brain. Patient was put on iodide of potassium and the fluid extract of hyoscyamus, and externally, wet cups along the spine and electricity. He has recovered motion of both limbs, arm and leg nearly normal.

Dr. Vogler presented a case of rheumatic arthritis; patient has suffered for two years with swelling and pain of upper and lower extremities, without being able to work.

He put her on large doses of salicylic acid for some days; externally, leeches, and leadwater and laudanum to allay the inflammation.

He speaks highly of an ointment composed of powdered camphor, watery extract of opium, belladonna, simple cerate, and zinc ointment. The sulphur-baths of this country or Baden-Baden and Wiesbaden of Germany,

and a dry and warm climate are advised in this disease.

Dr. Deaver presented a case of shoulder-joint amputation (after Larrey's method), which he performed some weeks ago (for injuries patient sustained), with very good results.

In speaking of injuries with loss of blood, Dr. Deaver advocates hypodermic injections of alkaline solutions; if that should not be sufficient, he recommends transfusion of blood. For stimulants, he recommends the hypodermic injection of ether as the best; after that, whiskey and digitalis. Stimulants by the stomach should be given after the stomach is quiet, and they should be given in small doses at short intervals with hot drinks.

In amputations, Dr. Deaver uses the catgut for the ligaturing of the blood-vessels, hot water to stop capillary hemorrhage, and, as an aseptic, bichloride of mercury solution, 1 in 2000, to wash the parts thoroughly, and then an antiseptic dressing.

AS SEMINAL EMISSIONS usually occur after the first sleep, and are caused by the irritation of a full bladder, Dr. Sudduth gathers from this that it is well to advise patients of this character to empty the bladder immediately upon awakening in the morning, generally about 4 A. M.

TRANSLATIONS.

METHYL CHLORIDE is a new local agent for treating hyper-pyrexia. In using this agent Dr. H. Bailly, of Chambly, does not permit it to act directly on the cutaneous surface. He prefers a stream from a syphon to deliver it in the centre of a tampon of cotton whose edges are of silk. This cold producing tampon can thus be kept at a temperature of from 15°–55° below zero.

In passing this tampon over the hand a sense of cold is experienced in a few seconds; then, the sensibility of the part is obtunded; it next becomes pale, and shortly afterwards hyperæmic; finally, complete anæsthesia is produced. If continued, the surface of the skin is colored brown, which persists several weeks. This point should not

be over-stepped, as vesication and necrosis may result. The application of this tampon is of value in some varieties of neuralgias, in rheumatism, pleurodynia, lumbago, migraine, tetanus, hydro-pneumothorax, etc. It is also serviceable in producing local anæsthesia for surgical operations.

ORIGIN AND CURE OF NEURALGIA.—Winternitz says that "The hypothesis that every neuralgia is based on a neuritis, an inflammation in any part of the peripheral or central nervous system, or in the course of the nerve distribution, has often been found a fallacy; and the supposed etiological results due to compression are also often wanting.

The types of pain in pure neuralgia are remittent and intermittent in character with intervals of entire freedom; the pain is lancinating; the cause must, therefore, be increasing and decreasing in its deleterious effect, ebbing and flowing; it should be sought for in the changes of assimilation and nourishment.

As Winternitz a few years ago pointed out, the muscular pain of rheumatism arises directly, or by a reflex rotate from the contraction of muscular vessels; the products of waste were carried off, and the neutralizing blood-flow decreased. The nerves in his opinion are affected in the same manner, as has been proven, the chemical reaction of nerves is altered in irritation.

This material (lactic acid) accumulates in the muscles, as well as in the nerves, irritating and producing neuralgia.

Every increase of blood-flow and pressure carries away a part of this deleterious material, or neutralizes it, decreasing the pain. This explains the origin of the remission and intermission of the same; it explains also the neuralgia of metal poisoning, and the result of therapy.

The indication consists in producing such a healthy and continuous flow of blood in the affected organs as to neutralize and carry away the accumulated irritant, promoting healthy assimilation, principally, by the use of electricity, massage and hydro-therapy.

PHILADELPHIA
MEDICAL TIMES.

PHILADELPHIA, JAN. 16, 1888.

EDITORIAL.

PHYSICIANS' ACCOUNTS.

PHYSICIANS are, as a rule, unnecessarily sensitive upon the subject of business; and the common remark that doctors are poor businessmen is considered rather as a compliment than otherwise. It does not follow, however, because a doctor may have poor business methods that he is *ipso facto* a better medical adviser, or that a good physician must necessarily be a poor business manager. On the contrary, from personal observation and an experience not limited to one locality, we can say that the most successful physicians are those who are most systematic in their work, and (although they may not parade the information) have excellent business ideas. We wish to avoid any invidious reflections, but our readers will be able to supply instances, especially from the ranks of our friends the specialists.

These remarks apply directly to the burning question of physicians' accounts. In the first place, in keeping the accounts the books should be neatly and accurately kept, so that in case of sickness or sudden death no unnecessary loss would accrue to the physician's family, which frequently requires all the money from the estate that it will yield. Moreover, in case of suit before a court, the accounts must be kept in plain legible style so that they can be understood by the average jurymen. A certain definite amount should be charged for services rendered. The use of arbitrary characters and ciphers will seriously impair the

value of the book in evidence. A visit is not *per se* a proper subject for making a charge, whereas a "service rendered," "consultation," or "examination, physical, chemical or microscopical," or a "surgical operation" would be. These charges should be entered on the book on the day on which they are incurred, or immediately afterward, in order that it shall be held as a book of original entry. It is sometimes important to establish in court the date of service rendered. This can be done positively only when the entries in the day-book are promptly made.

With regard to sending out the accounts, this should be governed by the convenience of the physician and his patients. It is not unprofessional to require a cash honorarium from office patients and strangers, nor is the semi-annual account more professional than the quarterly or monthly one. There is no good reason why physicians should not require monthly or even weekly settlements with their patients, if they find it more to their interest than to wait for six months. We think, that if the rule were generally adopted by physicians, of sending out their accounts for short periods, it would be to their advantage. Small bills are more easy to pay than large ones and patients need to be taught that the money is due at the time the service is rendered.

There is a false delicacy sometimes manifested with regard to collections, and an indifference shown to accounts which is not always felt. Our friends of the legal profession could give us some very good advice (for a consideration) upon this point, although in some instances we could not follow exactly in their footsteps. The Code of Ethics has a word of caution for those who are above the necessity of earning money by the practice of medicine;

and the same warning should be directed to those who affect to be above the vulgar necessity of fees. The truth is that as a rule the practice of medicine is followed as a means of earning a livelihood. By the community it is considered an honorable vocation, and its followers will receive all the respect which they can command. A good way for a physician to secure the respect of others is to have a proper appreciation of himself; and to insist, politely but firmly, upon his rights, pre-eminent among which is the right to live. The means whereby he lives flow naturally from the physician's accounts. F. W.

SHOULD PHARMACY BE REGARDED AS A PROFESSION?

OUR recent editorial on the Relations of the Physician and the Pharmacist has evoked much comment, some favorable, some dissentient, and some which is clearly unjust or based upon misunderstanding of our argument. Among the latter we number a writer in the *Druggists' Journal* who accuses us, among other offences, of wholesale abuse of the pharmacists. This charge appears to be due to our statement that the standard of the pharmacist is commercial rather than professional.

Being somewhat curious to learn the opinion of pharmacists themselves upon this subject, we addressed the following question to a number of the leading druggists in the central part of this city: "Is Pharmacy, as at present practiced, a profession or a business? I do not want to know what it ought to be, what it is in theory, or in individual cases, but what it actually is at the present day." Among the answers received were the following: "One-tenth profession, nine-tenths business;" "They tell us at college that it is a profession, but it is a business;" "A

business, pure and simple;" "Two of the most distinguished representatives of the professional standard in this city were both forced out of business;" "Pharmacy owes its position to-day solely to those who have regarded it as a business." Scarcely any held to the strictly professional idea; while many unconsciously acknowledged the rule of the laws of commerce, by stating that they kept as near to the professional standard as the conditions of trade would permit.

In this discussion, nothing has been farther from our thought than abuse of the pharmacists. We hold this class in respect and cherish towards them feelings of amity. We must bear testimony to the knowledge and skill with which their work is almost universally done, and to their general trustworthiness. They have taught us valuable lessons as to compatibilities, and elegance in exhibition of our remedies. Dr. Mitchell, in his able communication which appeared in our last issue, has commented on us very fairly, by suggesting that the physician needs special preparation for dispensing as well as the druggist for prescribing.

But the special skill which a druggist may possess does not constitute pharmacy a profession. There are a few of the old pharmacies still left, where nothing is sold except things for the use of the sick; but they are too few to be considered representative of modern pharmacy. From ocular proof, we must still insist that the pharmacist as we know him is governed by the inexorable laws of trade, and no matter how much he may desire to escape from them, he cannot as long as he remains in business.

The difficulty is not met by the admission of pharmacists into the medical profession. While in some branches they are excellent students, the druggists rarely rise high in the ranks of

medicine. The reason is that they are unwilling to take up the rudiments with sufficient zeal and appreciation. It is with difficulty that they can be induced to dissect, or to enter the laboratories.

The remedy, as it appears to us personally, is to be found in a conjoined course of study, in which the student is taught medicine and pharmacy, and begins practice as a physician with his little pharmacy, and allows time to show which is his natural vocation. But as for compelling the druggist to dispense medicines only on prescriptions, or forbidding the physician's dispensing his own remedies, we are very decidedly of the opinion that they are alike impossible, under present conditions.

W. F. W.

SUICIDES NOT NECESSARILY INSANE.

AT the annual meeting of the Medical Jurisprudence Society, held on the 10th instant, Judge Wm. N. Ashman, in his annual address in retiring from the office of President of the Society, discussed the legal aspect of suicide. He concluded, after a careful review of the arguments advanced, and especially of the paper of Prof. Reese, read at a previous meeting, that suicide, from a medico-legal point of view, is not necessarily proof of insanity in the person committing it. With regard to the policy of the law now in force in some States, making attempted suicide a penal offence, by the nature of the case such laws are ineffective. As Judge Ashman aptly remarks, How could the fear of punishment affect the man who, driven to desperation by the woes he is already burdened with, seeks a speedy end to them by suicide?

Under certain circumstances in modern jurisprudence, the plea of insanity is offered and accepted as a legal fiction in order that a verdict may be rendered

in response to public sentiment rather than in accordance with the actual facts in the case. It is probable, therefore, that life-insurance companies will still be compelled to pay policies on the death of suicides, although no evidence of insanity be submitted beyond the mere act of self-destruction. The opinion of Judge Ashman, however, that suicide is not of itself sufficient evidence to prove the existence of insanity, seems in accordance with the view generally taken by medical men. If self-murder be incompatible with complete sanity, as some authorities declare, they should also state what proportion of persons in the community they would consider completely sane.

F. W.

THE *Pharmaceutical Era* has inaugurated a series of collective investigations which promise to be of much value. A query is published each month, the answers appearing in the next issue. Pharmacists and physicians are asked to furnish answers and to propose questions.

This species of investigation and intercommunication, by which the readers of a journal become members of a society, has always seemed to us a most excellent thing. In the first number of the present volume we published a letter on the Chautauqua System as applied to physicians, which we regret to say has not been taken up by our readers as we hoped.

IN THE DEATH OF WESLEY M. CARPENTER, M. D., which occurred on the 7th inst., in his 49th year, medical journalism sustained a severe loss. He had been connected with the *Medical Record* for fifteen years. An expert short-hand reporter, he was a well-known figure at the meetings of the leading Medical Societies in this country. He was Clinical Professor of Medicine in the Medical Department of the University of New York.

LETTERS FROM SPECIAL CORRESPONDENTS.

PARIS LETTER.

THE RADICAL CURE OF CONGENITAL HERNIA—EPIDEMIC OF LEAD POISONING, CAUSED BY THE USE OF ADULTERATED FLOUR—MYROBALANUS—HYDROFLUORIC ACID VAPOR IN PHTHISIS—PHOSPHATE OF COPPER IN PHTHISIS.

THE Radical Cure of Congenital Hernia.—For a number of weeks past the *Société de Chirurgie* has been considering this subject, and as most of the Paris surgeons have given their opinions in regard to this operation, we communicate to your readers the present state of the discussion. M. Richélot first gave an account of a man of twenty-five years, who had been in a hospital for orchitis in a single testicle, complicated with a strangulated hernia on the side that the testicle was missing from. In the course of the operation, which was performed for the radical cure of the hernia, the testicle was found above the abdominal ring, and as it was atrophied, while the patient did not know of its existence, castration was performed as soon as the hernia was reduced.

This action was considered justifiable in this special case, but as a general rule, for its moral effect, the testicle should be allowed to remain, and attempts have been made even to suture it to the scrotum. M. Richélot did not regard the dissection of the sac in these cases such a difficult matter as many suppose, unless there was found complete adherence between the sac and the hernial mass. Care should be taken to penetrate clear up to the *true sac*, to isolate the persistent vagino-peritoneal tract, and to resect the serous canal in such a way as to prevent the testicle being hurt should it be ectopic. The cord should be freed at a certain point, and the inferior portion of the tunica vaginalis sutured and closed up, and then a careful dissection must be made of the superior portion up to the inguinal opening. M. Terrillon said that he dissected along the lateral sides of the canal as high as possible, and then he sutured these sides together all along with catgut, so that they formed

a sort of cushion on which the elements of the cord rested, and the intestine (previously reduced) is kept in place by this closed up column of sutures.

M. Lucas-Championnière said, that the best operation is to dissect the vagino-peritoneal serous covering as high as possible and resect it there, and that the best support is given by a good cicatrix formed by the suture of the sac to the mass of tissue around the inner ring. He also advised the performance of the operation for the radical cure every time that the hernia was not a simple one. He would perform the operation for any patient who sought it, even if only for the reason that the truss was insupportable to him, for he considered wearing an apparatus almost as dangerous as the operation.

M. Anger presented a patient whom he had lately operated upon for hernia, in order to prove the value of his plan of not trying to obtain a primitive reunion, but allowing the wound to suppurate, as he claimed that by this means the tissue formed by the cicatrix is much stronger than that formed in healing by first intention.

M. Terrier, with most of the other surgeons, however, would not admit this; most of them were of the opinion that first intention healing gave the strongest cicatrix.

M. Berger said that it would seem, from what had been said so far, that the radical cure is the only treatment for these hernias, so he proposed to ask some questions. First.—Is congenital hernia incurable by other means? and is it dangerous to life? Second.—Is the radical operation benign and efficacious? He had examined the records of ten thousand cases of hernia where trusses had been given out at the hospitals. Taking sixty of them to study apart, only two of them between the ages of fifteen and seventy had declared their hernia to have been congenital; so it is seen that congenital hernia is somewhat rare in adults who had worn a truss from childhood, and it would seem also that the affection is not an incurable one. It is also a recorded fact that "*congenital hernia terminates favorably whether operated upon or not*," as a rule it can be reduced by

taxis under chloroform. Kelotomy is also successful in many cases, so that they cannot be declared dangerous to life either, for they are often cured by other means, such as appropriate apparatus. The second question, as to the radical operation being benign and efficacious, could also be answered in the negative. Socin did one hundred and thirty-six operations, fifty-two of them for strangulated hernia, and in these he had two deaths. The British Medical Association last year reported fifty operations and two deaths; another series of statistics gave sixteen operations and four deaths, so that at least *four per cent. are lost*. From the thousands of cases in the Paris hospital statistics where trusses only were in use, the loss even in strangulated cases never amounted to one per cent. As regards the efficacy of the radical operation, Socin reported sixty-four cures in his cases, but he also gave forty-one returns of the hernia, and he does not follow his cases up to thirty or forty years of age, the period when the operated congenital hernias very often return.

M. Berger, however, does not wish to be understood as advocating the absolute rejection of the radical cure in hernia, but lays down the following rules: 1st. Never make the operation in congenital hernia before fifteen years of age, because spontaneous cure, or that by bandage, may be hoped for up to then. After fifteen, the operation can be advised, if the hernia persists or increases after proper bandages are used, but it would do no harm to wait longer still in some cases, even up to the twenty-fifth year of age. The existence of ectopia, or of an irreducible portion of omentum, is a formal indication for operation, but here again not before fifteen years of age as the rule.

Professor Trélat gave the following as his rule: All hernias, congenital or not, that are not *completely, constantly and easily reduced and controlled by a bandage, are to be operated upon*, by the cure called radical, which is not so radical as its name implies, being merely an operation that facilitates the retention of the intestine. He was also much disposed to accept M. Terrillon's

method of holding the intestine up by suturing the adjoining sides of the sac and preserving the elements of the cord when possible.

Professor Léon Le Fort said it was going too far to say that the radical operation was even less dangerous than a bandage, as most of the patients after the so-called radical cure had to wear a bandage. He was not disposed to accept M. Trélat's rule, for some hernias containing a large quantity of omentum could not be entirely controlled, and yet did not need an operation. Then, again, there were others that were not constantly retained as some patients let them out at night, but that did not call for an operation. A great deal depends on adjusting a *proper sort of bandage*. M. Le Fort described how a proper bandage should be fitted by the surgeon; not by sending the patient to a bandage store or giving him one from stock. Prof. Le Fort, after reducing the hernia, places over it a flat piece of gutta-percha (which is first softened in hot water), much as the dentists take an impression of the mouth for a set of false teeth. He presses this preparation in as closely as possible, making perfect adaptation to the depression; a plaster-of-Paris cast of this is then taken, and a counter-cast made of hardened plaster, and this mould is placed in a vise, or between a letter-press, and a sheet of felt (softened by heating it) is placed between, so that a perfect form is obtained. This is tried on several times, and the rest of the adjusting of the spring, strap and pad is easy. M. Verneuil closed the discussion by saying that he reserved the operation for the radical cure for complicated cases.

Epidemic of Saturnine Intoxication Caused by Flour.—In the month of June, 1887, more than a hundred persons living near the town of Roanne were taken with peculiar symptoms; some of them had a general feeling of extreme weakness, others had pains like chronic rheumatism, while others again vomited, and the larger part of them had violent colicky pains. Subsequently they were mostly found with the blue line on the gums that established the diagnosis of lead poisoning. After a long investigation it was found

that the rye flour used by the community all came from the same miller, and on close examination it was found to have minute quantities of lead in it. The mill was carefully looked over but no trace of the metal was found until the elevator apparatus was examined, when it was noticed that the small buckets carrying the flour from the mill to the sifting machine were lined with a lead composition. The flour before it passed these buckets was pure and afterward contain lead particles; so that notwithstanding the slight passage of the flour through these cups it was enough to contaminate it with poison, as was proved by the complete disappearance of all symptoms after the system was changed. The conclusions voted by the *Société de Médecine Légale* in this case were as follows: 1st. The employment of elevator tins lined with lead to carry flour can lead to serious saturnine intoxication. 2d. In the present case it was in the form of the lead sulphate that had combined in the flour owing to the fact that the mill stones had been repaired with the sulphur cement, but it was evident that sulphur would have done no harm by itself if the buckets had not been lined with lead. In any case, no matter how small the dose of lead is, if it is long continued it will certainly lead to saturnine intoxication.

Myrobalanus.—Considerable use is made of this medicine in the East (Turkey) for dysentery and other chronic diarrhoeas with real success, and is said even to cure cholera. M. Constantin Paul has recently tried it at the Lariboisière hospital here. It is a dried fruit of the plum kind. There are four true varieties called M. Citrina, or yellow; M. Indica, or black; M. Belliric, and M. Chebula. The black is mostly used; it has a strong bitter taste, is without smell, and colors the saliva green. It is commonly given in pill form, using four, eight, or even twelve pills in twenty-four hours and gradually reducing the number.

Action of Hydrofluoric Acid in Cases of Phthisis.—A report made to the Academy of Medicine, in regard to the treatment lately adopted by Drs. Seiler and Garcin as above, says that for many years the caustic action of this

acid had prevented its use in therapeutics; but in the great glass works at Baccarat it was noticed that the workmen were not at all bothered with the vapors of the hydrofluoric acid used in the manufacture of glass; indeed, they were quite of an opinion that it was beneficial to those among them who suffered from pulmonary complaints if they were allowed to inhale its vapors. As long ago as 1862, Dr. Bastian made some experiments with this acid in bronchial complaints as well as phthisis, and he was followed in this afterwards by Professors Charcot and Bouchard, without, however, any satisfactory result being obtained. Lately, M. Dujardin-Beaumetz tried it again, and for some time back the results obtained by the present experimenters have been so remarkable, that they do not hesitate to ascribe to this treatment the first rank in the treatment of phthisis pulmonalis. First of all, it is certainly well supported in the form of vapor by all patients; and it is a most powerful antiseptic, for applied to fetid wounds in feeble doses, such as 1 to 2000, it will modify the discharges. It has also been used in a strong solution painted on the parts (ten grammes of hydrofluoric acid to fifty grammes of water). M. Hippolyte Martin made a series of trials to prove whether or not it would destroy the bacillus, using the ammonium fluoride. This is a solid salt, and can be handled better than the acid itself; a solution of this salt does not affect the skin when used upon it, while the acid does. From these clinical trials, and others made on rabbits, which were made tuberculous by inhalations of sputum from phthisical patients, it resulted that this acid was found to have a considerable destructive power over the bacillus. M. Garcin passes a weak solution of the acid in water, through carbonic acid gas, and has the patients inhale the vapor coming from this. One of the first effects he noticed was a return of appetite, which is remarkable, for it is truly said that if the digestion can be kept up there is a good chance of cure in phthisis. The night-sweats, cough and fever are all improved under its use, while the breathing becomes more free, and,

contrary to expectation, there was no hæmoptysis from the acrid gas. The expectoration changes in character from yellow to white, and the bacillus in some cases disappears, or at least can no longer be found in it. The following are the statistics of one hundred cases given by M. Garcin: Cured, thirty-five; ameliorated, forty-one; stationary, fourteen; deaths, ten. The Committee concluded that the inhalation of hydrofluoric acid vapor possesses incontestable therapeutic value when the phthisis was not too far advanced, and that its application was easy, while it could readily be combined as a base with any other good therapeutical applications, as well as with hygienic treatment, which is still regarded as the best of all.

Phosphate of Copper in Phthisis.—Considerable attention has been attracted to Dr. Luton's claim that phosphate of copper has a curative action in tuberculosis, and a long description of the method, with formulas for internal treatment, is given in No. 30 of *Revue General de Clinique et Therapeutique*. At present he proposes to extend its use to the external manifestations of tuberculosis, such as the so-called scrofulo-tuberculous ulcers, adenopathies, fistulous tracts, etc. The tendency among Paris surgeons and physicians is to deny that such a condition as scrofula exists. Prof. Lannelongue and others teach that Pott's disease, coxalgia and many abscesses and tumors are simply the effects of regression of tubercular deposits. To return to Dr. Luton's cure, he uses an ointment as follows:

Vaseline 50 grammes
Pure phosphate of copper .50 centigrams
Or, stronger still,

Vaseline..... 30 grammes
Pure phosphate of copper .1 gramme

These he used typically on all ulcers, or rolled out in bougie form for introduction in fistulas.

THOMAS LINN, M.D.

Paris, Dec. 9, 1887.

CHLOASMA.—When patients are troubled with *pigmentary deposits* during pregnancy, Prof. Stewart gives a persistent treatment of Fowler's solution and aromatic sulphuric acid.

ABSTRACTS AND GLEANINGS.

PROVIDENT DISPENSARIES.—At a recent meeting in London, a scheme was presented by which medical attendance for the industrial classes was to be placed on a self-supporting basis. This plan contemplated the opening of dispensaries in each district, forming a union with the hospitals. Single persons were to pay twelve cents a month, twenty-four cents for a man and wife without children, twenty cents for a couple with children, and six cents each for children under sixteen years.

The dispensaries were to be open only to those whose earnings do not exceed the following: For a single person or man and wife, \$7.50 a week; for a family, \$10 a week; for domestic servants, \$75 a year.

Persons requiring immediate attendance pay an entrance fee of not less than sixty-two and a half cents, which entitles them to treatment for one week, after which they pay twenty-four cents a week if able to call on the doctor, and sixty-two and a half cents if visited at home.

The scheme was advocated by Sir Spencer Wells, Mr. Timothy Holmes, and Dr. J. Grey Glover; and was finally carried by an overwhelming majority. The doubt was expressed that the scale of charges was too meagre for the needs of the physician, which would seem exceedingly probable.—*The Lancet*.

MASSAGE IN BILIARY COLIC.—CONINGORE reports a case of biliary colic in which systematic pressure and relaxation was made to the gall bladder for half an hour, when relief was suddenly experienced followed by the discharge of a large mass of small gall-stones. A second attack was relieved by the same manipulation.—*Progress*.

ONE of the largest and oldest British Life Insurance Companies, which has kept separate registers for twenty years, declares that, among the strictly abstaining class, the real mortality has fallen short by 30 per cent. of the ordinary expectancy, while fully 99 per cent. of moderate drinkers have attained this expectancy.—*Med. and Surg. Reporter*.

REVIEWS AND BOOK NOTICES.

PENNSYLVANIA STATE COLLEGE, AGRICULTURAL EXPERIMENT STATION, BULLETIN NO. I.

In this little pamphlet we see evidences of the growth of an institution which has finally won its way into favor, in spite of deeply rooted prejudice. The practical farmer looked with derision upon the man who would attempt to acquire the lore of the agriculturalist from books, while the boy who could take a college course expected the easier life of a profession. These causes tended to dwarf the growth of the college. Now-a-days the professions have become over-crowded, and the general elevation of the educational standard has resulted in an increase of respect for the educated workman. The ancient agriculturist has found that a man who speaks grammatically may draw a furrow straight, and that something else besides experience may teach one what soils may be benefitted by lime. From this change in public sentiment comes prosperity and popularity to the State College. Its work is quite in accord with public needs. It "invites correspondence and suggestions from farmers. Inquiries pertaining to agriculture or horticulture will be answered. Samples of produce will be examined and reported upon; useful and injurious plants, insects and fungi will be identified; and, in short, all work proper to such a station will be performed free of charge, so far as it is for the general use and advantage of citizens of Pennsylvania." Such a work, directed by capable persons, should prove of the greatest value to the State; and this, we believe, will be the case, as the agricultural classes come to appreciate the privileges offered to them.

ANATOMY, DESCRIPTIVE AND SURGICAL. By HENRY GRAY, F.R.S., etc. Edited by T. PICKERING PICK. A new American, from the Eleventh English Edition. Thoroughly revised and re-edited, with additions by WM. W. KEEN, M.D., Professor of Surgery, etc. To which is added "Landmarks, Medical and Surgical." By LUTHER HOLDEN, F.R.C.S., with additions by WM. W. KEEN, M.D. Phil-

adelphia, Lea Brothers & Co., 1887. Sheep or cloth, 8vo, pp. 1100.

The present edition of Gray has been carefully revised by Prof. Keen, who has made some additions which will be appreciated alike by the anatomical student and the surgeon. The addition of color to the diagrams makes them appeal more strongly to the eye, and possibly impresses them upon the memory. Recent advances in anatomy have been incorporated in the text, making the work a cyclopædia of human descriptive and surgical anatomy. We congratulate the students who are able to obtain such an anatomical text-book as this.

THE PRACTICE OF MEDICINE AND SURGERY APPLIED TO THE DISEASES AND ACCIDENTS INCIDENT TO WOMEN. By W. H. BYFORD, M.D., and HENRY T. BYFORD, M.D. Fourth Edition. Revised, rewritten, and very much enlarged. With three hundred and six illustrations. Philadelphia, P. Blakiston, Son & Co., 1888. 8vo, pp. 820.

The careful revision and additions which have been made to Prof. Byford's well-known work on diseases of women constitute it one of the best of the recent treatises which we have seen. The principal additions are the chapters on "Practical Observations upon the Anatomy and Physiology of the Female Pelvic Organs;" "Examination of the Female Pelvic Organs" (three chapters); "Displacements of the Uterus" (three chapters); "Affections of the Ovaries" and "Fallopian Tubes;" and the paragraphs upon "Oöphorectomy," "Tumor of the Broad Ligament." The book is handsomely printed and abundantly illustrated.

THE Medical Society of the County of Kings, has authorized the publication of a monthly medical journal, to be known as the *Brooklyn Medical Journal*.

LA RIFORMA MEDICA, edited by Prof. G. Rummo, enjoys the distinction of being the only daily medical journal in the world. It is published in Rome, and is a welcome addition to our exchange list.

LETTERS TO THE EDITORS.

It is the earnest desire of the Editors to increase the usefulness of this Journal and to render it a practical helper to its readers. One method of accomplishing this end is to open a column devoted to letters to the Editors. Short, concise papers upon medical subjects, records of cases worth being reported, and queries on any medical subject are requested.

A PHARMACIST'S VIEW.

EDITORS OF THE MEDICAL TIMES:

I have just read with much interest Dr. Mitchell's article in the *MEDICAL TIMES*, to which you were kind enough to call my attention. Leaving out a little exaggeration, probably put in to make it read better, the article is very true.

Dr. Mitchell takes the mistaken ground that men, whether physicians or apothecaries, are governed and ruled by what he calls "business competition," without regard to principle at all. There be men and men, and what may be true of some is entirely untrue of others. I believe that the abortionist is rare in the medical profession; I believe that the sharper is rare among the lawyers; I believe that the seducer is rare among clergymen; I believe that the man who substitutes and adulterates is rare among apothecaries.*

I expect that it is entirely true that there are abortionists among physicians, and that there are men who substitute and adulterate among apothecaries, but it is as untrue and as mistaken to think that the rule is substitution and adulteration among apothecaries as it would be that the rule is that physicians are abortionists.

As to the counter prescribing, there are a large number of stores in the city where such a thing is not done at all. Leaving my own place out of the matter entirely, I do not believe that Mr. Morgan, or Mr. Shinn, or Mr. Grahame, or Mr. Borell, or Mr. Ottinger, or any one of the great many others that I could name, do any such thing or permit it to be done in their stores. *This*

* We can endorse this statement, from our personal experience of thirteen years' practice in Philadelphia.—Eds. *PHILADELPHIA MEDICAL TIMES*.

sort of thing is done, and cannot well be avoided. A man would come in and say, "I want a bottle of cough mixture," without specifying what cough mixture he wants, and without saying anything definite, he is likely to get Brown Mixture or Jackson's Pectoral Syrup or some such thing; or he will say he wants a plaster to wear on his chest for a cold, and the apothecary will give him an Allcock's Porous Plaster, but as to any going into symptoms and so attempting a diagnosis and then a prescription based upon this diagnosis and these symptoms, such things are not done in the better class of places. It may be done in some places, and probably is, but the remedy for that sort of thing is to not let prescriptions go to such places.

As to the charges against physicians, I have known of men standing high in the profession who have written prescriptions in cipher; but in my very long and large experience, I have never known of but two men to do that thing. I have had a great many prescriptions for preparations, the formulas of which were not known to me, and which formulas were either those of the physician or of some apothecary, who had made a nice preparation and gotten a physician to prescribe it. When the formula has been a formula originating with the physician, I have always asked him for it, and have never been refused but in one case, and that was in the case of one of the men who writes his prescriptions in cipher. When the formula has been a formula originating with the druggist, I have, of course, never asked the apothecary to give me, for nothing, that which has cost him time and labor, but have never been refused the privilege of buying such a quantity of the preparation as I wanted to fill what prescriptions I might have.

I have been here in this store now for nearly twenty-one years. In that time, I have never been approached by a single physician with any proposition, direct or implied, for a percentage on prescriptions. I do not know to-day the man whom, if I were inclined to, I would dare approach with such a proposition myself, and I do not know of such a thing ever having been done, directly

or indirectly (and I want to make this statement as broad as words may say), anywhere or by any persons or firms in the city of Philadelphia.

These are the points in which it seems to me that Dr. Mitchell's article is exaggerated. I fail to find in my own experience, or to hear of it in that of others who are seeking honestly to do a legitimate business, the clashing and misunderstandings and bickerings that Dr. Mitchell talks about as existing between the physician and the apothecary.

The difficulties of pharmacy as a business he does not exaggerate in the least; whether he overdraws the picture as far as the practice of medicine is concerned you know better than I do.

Now just one personal word at the end—and maybe you think that a good many words have been “personal” so far—but if by a “prominent Chestnut street pharmacist” is meant your humble servant, please distinctly understand that it is not for the purpose of “counter prescribing” in the future that I am studying medicine. You can rely upon one of two things as the outcome of it: either that I will be a better apothecary only and that I will not prescribe at all, or that I will be a physician exclusively. I shall not be a mongrel.

I have not written this with the thought that you will publish it, but just simply to set myself straight as far as my experience goes; and, lastly, to set myself personally straight with you gentlemen, whom I hope to count always as my friends.

GEO. I. MCKELWAY.

Philadelphia, Jan. 3, 1888.

ARE OPERATIVE PROCEDURES ALWAYS ADVISABLE?

JANUARY 6, 1888.

Editors MEDICAL TIMES:

I attended the recent meeting of our County Medical Society, and heard the two papers upon the most recent surgical *fad*, viz., O-oph-o-rect-o-my. It is evident, from the attention paid to it, that the members find this a very interesting subject. The results shown are certainly remarkable. The operation, like so many other surgical procedures,

when contrasted with medical treatment, may be said to be brilliant. The fine results in successful recovery are gratifying, and have certainly expanded our ideas of the possibilities of surgery. Doubtless the future will see as bold and skilful treatment of other abdominal or thoracic organs, with equal success. We are learning how to guard good work and to follow it up with intelligent caution; to aid nature with precision and defend it from fatal, though unseen, enemies. But, because a thing can be done, it does not follow necessarily that it must or should be done. It was brought out, in discussion, that some ovaries had been removed and the pain remained. It was stated that, in one large New York hospital, only one in five of a large number of ovaries removed was found to be diseased. Indeed, a second thought may suggest to us that all the ills of a woman's life will not be cured by the removal of the ovaries. Let us rather say, that the only direct logical teachings of these brilliant sections and faultless recoveries are, that *when necessary* the abdominal organs may be, with less hesitancy, laid bare, and that antiseptics is imperative.

Can it be old-fashioned to suppose that the glory of surgery is its conservatism? In other quarters, surgeons are proud to show limbs and members restored to large measures of usefulness from mangled and diseased conditions, which, ideas current only a few years ago, would have doomed to immediate removal or extirpation. Progress is shown by saving and restoring. But when pain comes, presumably from diseased ovaries, may the conservative policy be set lightly aside and a policy of destruction substituted, simply because it is possible? Rather let us be on the watch to hail that man as on the road of true progress, who will show effectively how to save the organ and restore its healthy function. C.

IS THIS A CASE OF ACUTE OR CHRONIC AMERICANITIS?

Editors MEDICAL TIMES:

In the spring of 1884, my health broke down; and the following were my symptoms: Persistent insomnia,

spinal tenderness, numbness, and formation of two fingers of my right hand and two toes of my right foot, an irritable bladder, and chronic gastric catarrh. I also had pain in my eyes and head after slight intellectual efforts, and suffered from melancholia. Walking, writing and reading all produced great exhaustion.

I thought this train of symptoms was produced by overwork. I had been lecturing on *Materia Medica* and Therapeutics, carrying on an extensive practice in medicine, and speculating in real estate, and also overseeing my farm.

My physician's diagnosis was neurasthenia. The treatment was strychnine, cannabis indica, electricity and blisters on my back, and complete rest for a time, six months of constant travel, and finally change of vocation. For almost two years I have been farming, which has agreed with me quite well. For the past year I have been able to perform a great deal of physical labor. I weigh about one hundred and ninety pounds and have the appearance of robust health. At the time I suffered most, I did not have the appearance, to the casual observer, of being a sick man. My health at this time is moderately good, and my sleep, for weeks at a time, is undisturbed. Undue excitement of any kind, a very hard day's work will, for a short time, interfere with my sleeping. I have used no hypnotics for a couple of years. Several months ago I resumed practice. I have an opportunity to travel for a New York chemical company, to introduce and sell their goods to physicians and druggists. I think it will be more congenial to my taste, and less laborious to myself than to do a country practice. My special object in writing to you at this time is to get your opinion as to the probability of a drummer's life agreeing with me as well or better than the practice of medicine. Do drummers suffer from neurasthenia as much as physicians? If you do not make a specialty of nervous diseases, and are not familiar with such cases, will you kindly ask Dr. * * * * or some other specialist, for his opinion of my entering active business life again? Hoping I have not intruded upon your valuable time. J. H. S.

[From our experience with drummers of various kinds, we are able to give a favorable report upon this subject. We never have observed among this class of men any evidence of nervousness, trepidation, hesitancy, want of self-reliance, or shyness. On the contrary we think that one of the chief essentials to success in this calling is a sort of sclerosis of the peripheral termination of the second branch of the fifth pair of nerves. If our esteemed correspondent has the other qualifications, and an accident policy upon his life, we think that he might enlarge his experience and improve his health at the same time by going "on the road." —Eds. P. M. T.]

FOUR MONTHS IN EUROPE.

Editors *MEDICAL TIMES* :

Will you please allow me space in your journal for the important question, What can be done to undo the mischief of that little book, "Four Months among the Surgeons of Europe," by Dr. N. Senn? It may be ridiculous for me to assail so prominent a man as Dr. Senn; but I do it in the interest of other medical men who, in the pursuit of knowledge, may likewise wish to spend four months in Europe.

On my arrival in Edinburgh, I asked permission of a prominent surgeon to attend his operations, and, in answer, Dr. Senn's little book was put before me. "There, sir, did you ever read that? I had in mind to say to the next American who came, No! Dr. Senn under the guise of a gentleman came among us and we treated him as such; but we do not want to make any more mistakes. Not that he has not spoken most kindly of myself; but he has abused some of the most deserving of men, some of my dearest of friends!" I need not comment on the work. A perusal of it makes too evident the ungentlemanly criticisms of many most prominent British medical men. That he is prejudiced in nationality, is plain; and in individuals, still more plain. This last can be no better illustrated than in the extensive applause accorded a very old man, who had no special interest, but a very young and beautiful wife! There is no excuse for Dr. Senn

indulging his idiosyncrasies at the expense of other Americans who wish to go abroad. In his own city he is despotic; but his skill as a surgeon will excuse him there. It will not over the rest of the world.

Those gentlemen coming hereafter I would advise to bring vouchers for good behavior to all other than German doctors, for you certainly will not be received with the warmth you would like.

The most awkward position I was placed in I could escape from only by replying, that Dr. Senn was not a typical American, and that I was quite sure Americans all mourn over his conduct.

Very truly yours, J. J. L.

[Graduate Univ. of Pa.]

Edinburgh, Scotland, Dec. 16, 1887.

Editors MEDICAL TIMES:

I have a case which puzzles me, and if you can find time to help me a little, I will be under great obligations to you. Patient, female, 55 years of age, has been suffering three years with the following symptoms: A feeling of irritation in the bowels and abdomen; which extends down the anterior portion of the lower limbs; and about every two weeks she has a number of dark green movements, which increase the irritation to such an extent that it appears almost unbearable. At night the irritability subsides, allowing her to sleep till perhaps 4 A. M., when its reappearance causes her to awake. The bowels move regularly, and without pain, every morning, and the movements are generally of a dark green color. She is not confined to the bed, and says she would feel well were it not for the "terrible, crawling feeling in the abdomen." There is also slight jaundice. She has been treated by various physicians, without being benefited. When I began with her, she was also troubled with acid stomach and burning generally through the abdomen, which I have relieved. Have given her almost everything I considered applicable to her case. Monobromide camphor pills (3 grs. each) one every 4 hours, with elixir of lactopeptine, after each meal, and a mineral acid just before has done more good than anything else.

Mystic Bridge, Conn. A. M. P.

MISCELLANY.

DR. COUNCILMAN'S INVESTIGATIONS ON THE MALARIAL GERM OF LAYERAN.*—The organism first described by Laveran has been met with in every case of malarial fever which the writer has met with. The organism is in high degree polymorphous, and ten tolerably distinct forms may be found in the blood. Some of these evidently represent different stages of development and the connection between them is obvious. Others present such marked differences in form, that no connection between them can be made out. Some of the forms are only found outside of the red corpuscles and others are found free in the blood. The forms described are: 1. Non-pigmented, small amoeba-like bodies inside the red corpuscles. 2. Pigmented bodies larger than No. 1, also in red corpuscles. 3. Pigmented bodies about the size of red corpuscles. 4. Segmenting forms of the No. 3 body. 5. Small hyaline bodies, which are formed by this segmentation. 6. A crescent-shaped body with pigment in the centre, the horns of the crescent being often connected by a fine line. 7. Round or oval bodies which differ from No. 6 in shape only. 8. A pigmented body provided with numerous, long, actively moving flagellæ. 9. Actively moving free flagellæ, which are evidently derived from No. 8. 10. A pigmented body with an active undulatory movement of its periphery. The first five forms are found only in intermittent fever. No. 4 only being seen in the blood during the chill period, and its presence is invariably connected with the chill. Nos. 6 and 7 are found in cases of malarial cachexia. The most interesting forms, and about whose parasitic nature there can be no doubt, are the bodies Nos. 8 and 9. These are generally absent in blood taken from the finger, but they may be found in any type of the disease. They are the only forms of the organism whose presence in the blood is not associated with a special type of the disease.

*Abstract of the address delivered by W. T. Councilman, M.D., before the Pathological Society of Philadelphia, at its Semi-annual Conversational meeting. The President, F. P. Henry, M.D., in the chair. W. E. Hughes, M.D., Recorder.

They were found, however, in 15 out of the 20 cases in which the blood of the spleen was examined. Of these 20 cases, 12 were cases of malarial cachexia, and 8 of intermittent fever. In the 12 they were found 10 times, and in the 8 cases of intermittent 5 times. From this it seems probable that Laveran was right in considering the flagellate organism the most important form of the parasite. The influence of quinine on the intra-corpuseular forms of the parasite is most marked. Doses of 15 grs., thrice daily, for 2 days in succession were found sufficient to cause them to disappear. The effects of the quinine were not so apparent upon the other forms. The crescents were apparently not diminished in number in one individual after he had taken 45 grs. of quinine daily for 7 days, and 60 grs. daily for 4 days.

In discussing the paper Dr. Osler said the thought which had struck him most forcibly, in looking over this subject, was the almost perfect unanimity which has prevailed among the different observers as to the appearance of these organisms. With the sole exception of the segmented form (No. 4), Laveran and the early observers had described them all. His own observations, since the communication he had presented to the Society last year, had been somewhat limited. He had, however, made a series of observations upon the blood of fishes and birds, since it had been stated that bodies resembling Nos. 1, 2, and 3 had been found in the blood of carp and some water-fowl. Prof. Baird had offered him facilities for this work at Wood's Holl and had kindly furnished him with 45 carp. He had failed to detect any such organisms in the blood of these. In the blood of a goose sent him from Ontario he had found 1 or 2 pigmented bodies. It had been stated by Dr. McCallum, who sent him the goose, that the bird had malaria. However, the bodies were not numerous, nor was the temperature of the goose elevated, nor so far as he could make out had it chills. Dr. Councilman had not figured one body which is very peculiar indeed, namely, a solid body in the centre of a clear space. It stains like a micro-organism, varies in size,

and although the body itself does not change in form, yet there are sometimes changes in outline in the clear space surrounding it; these were somewhat abundant in one case only. One other point with regard to the clear bodies (No. 1), in 5 or 6 instances he had seen such bodies pass out from the corpuscle, remaining out, and undergoing no further change of form. He was not altogether prepared to say what was the relationship of these bodies to the other bodies described. It has been claimed that similar changes can be obtained by special methods of treating the blood. The most important question is, first, to determine the relationship of the hyaline to the pigmented bodies; and the possibility that the hyaline may not be directly associated with them. He was convinced that the pigmented and segmented bodies were merely different stages. He could fully confirm what Dr. Councilman said with regard to the crescents. They are most peculiar and interesting bodies, occurring in the chronic cases, and in those in which there have been no chills. Three weeks ago he had lectured on a case as one of mild typhoid fever; it had lasted 8 or 10 days with constant fever, up in the evening, down in the morning, slight enlargement of the spleen, no spots. His resident examined the blood and found what he thought were crescents. The case got rapidly better, left the hospital, and returned in a few days with a distinct chill, with crescents in the blood and a well marked remittent fever. The motile forms he had not seen nearly as frequently as Dr. Councilman; though he had not examined the blood from the spleen, they had been present in 8 or 10 cases. Nor had he seen free filaments nearly so often; when he wrote his paper he had not seen them at all. Since then he had watched the process of separation. It was out of the question to suppose that the crescents or motile forms could come from degeneration in the stroma of the corpuscle, but that the hyaline forms resulted from such changes was not altogether improbable, and further investigations were necessary to determine this point. Dr. J. P. C. Griffith called attention to the diagnostic value

of these organisms, and instanced a case where, from the indefinite history and symptoms, he was unable to make a diagnosis until after an examination of the blood, when a short course of treatment resulted in a cure. Dr. H.C. Wood said that no one seemed to have made any connection between the crescents and the amoeboid forms, they seem to differ in that these are destroyed by quinine, those are not affected. We know that malarial cachexia is cured by quinine, arsenic and iron; if these remedies have no effect on the crescents, what connection have these bodies with malaria? And what becomes of them. Do they eventually disappear? Dr. Formad asked whether these organisms are the same as the bodies described by Hütter some twenty years ago. Dr. Councilman said, in concluding, that Hütter described moving bodies attacking the red corpuscles, existing in all fevers and apparently almost everywhere else. These observations had never been confirmed. The point raised by Dr. Wood had always puzzled him, and for a long time he had tried to reconcile himself to a belief in two distinct diseases, but this he could not do, as always as the other forms disappear, the crescents appear. He had never seen the crescents unless with a history of previous chills. He was not altogether prepared to say that quinine had no effect on the crescents, though in several cases he had given it in large doses with no results. Still in some cases they do seem to disappear. He thought with Dr. Osler that the crescents could not be possibly produced by changes in the stroma of the corpuscles, though some of the other forms might.

MEDICO-CHIRURGICAL HOSPITAL.—The annual meeting of the corporation will be held at the Medico-Chirurgical Hospital, on Cherry Street, above Seventeenth Street, Philadelphia, on Monday, January 30, at 3 o'clock P.M. Reports from Directors and Managers will be presented.

THE THROAT HOSPITAL, AT GOLDEN SQUARE, W. LONDON, has opened a Post Graduate Course of Instruction in Diseases of the Throat and Nose. Each

course of instruction lasts four weeks, the object being to give actual instruction in the diagnosis and treatment of diseases of the throat and nose, besides a series of didactic lectures by the well-known members of the staff. Old pupils of this School are scattered throughout the country, many of whom will be interested in this new arrangement, which already has been well supported.

OBITUARY.—Robert A. Given, M.D., of Burn Brae, Clifton Heights, Delaware County, died on the morning of the 10th inst., in the 73d year of his age.

CHANGES IN THE MEDICAL CORPS OF THE NAVY DURING THE WEEK ENDING DECEMBER 31, 1887.

PASSED ASSISTANT-SURGEON C. BIDDLE.—Detached from the Marine Rendezvous, Philadelphia, and placed on waiting orders.

MEDICAL DIRECTOR C. J. CLEBORNE.—Detached as member of Medical Examining Board, December 31, and ordered to Norfolk Naval Hospital, January 5, 1888.

MEDICAL INSPECTOR M. BRADLEY.—Detached from Naval Hospital, Norfolk, January 5, 1888, and placed on waiting orders.

MEDICAL INSPECTOR J. H. CLARK.—Detached from special duty at Portsmouth N. H., and ordered as member of Examining Board at Washington.

OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF MEDICAL OFFICERS OF THE U. S. MARINE HOSPITAL SERVICE, FOR THE WEEK ENDED JANUARY 7, 1888.

MURRAY, R. D., SURGEON.—On being relieved at Ship Island, Miss., to proceed to Key West, Fla., and assume charge of the Service, January 4, 1888.

DEVAN, S. C., PASSED ASSISTANT-SURGEON.—Relieved from duty at Port Townsend, W. T., to assume charge of Sapelo Quarantine, January 5, 1888.

GLENNAN, A. H., PASSED ASSISTANT-SURGEON.—Relieved from duty at Key West, Fla., to assume charge of the Service at Port Townsend, W. T., January 5, 1888.

CARRINGTON, P. M., ASSISTANT-SURGEON.—Promoted and appointed Passed Assistant-Surgeon from January 20, 1888, January 7, 1888.

OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF MEDICAL OFFICERS OF THE U. S. MARINE HOSPITAL SERVICE, FOR THE TWO WEEKS ENDED DECEMBER 31, 1887.

BEVAN, A. D., PASSED ASSISTANT-SURGEON.—Resignation accepted, to take effect January 31, 1888, and leave of absence extended to that date, December 31, 1887.

BRATTON, W. D., ASSISTANT SURGEON.—Granted leave of absence for thirty days, December 30, 1887.